

## DAFTAR PUSTAKA

- Awad, M., & Khanna, R. (2015). *Efficient Learning Machines : Theories, Concept, and Applications for Engineers and System Designers*. Apress.
- Karim, B., Sentinuwo, S. R., & Sambul, A. M. (2017). Penentuan Besaran Uang Kuliah Tunggal Untuk Mahasiswa Baru di Universitas Sam Ratulangi Menggunakan *Data Mining*. *E-Journal Teknik Informatika*, 1-9.
- Kowalczyk, A. (2017). *Support Vector Machines Succinctly*. USA: Syncfusion.
- Kurniawan, H., Defit, S., & Sumijan. (2020). Data Mining Menggunakan Metode K-Means Clustering Untuk Menentukan Besaran Uang Kuliah Tunggal. *Journal Of Applied Computer Science And Technology (JACOST)*, 80-89.
- Maslihah, S. (2019). Aplikasi Logika Fuzzy Untuk Menentuka Uang Kuliah Tunggal (UKT). *Jurnal Riset Pembelajaran Matematika*, 43-48.
- Parapat, I. M., Furqon, M. T., & Sutrisno. (2018). Penerapan Metode Support Vector Machine (SVM) pada Klasifikasi Penyimpangan Tumbuh Kembang Anak. *Jurnal Pengembangan Teknologi Informasi dan Ilmu Komputer*, 3163-3169.
- Putra, R. A. (2018). Penerapan Naive Bayes Classifier dengan Gaussian Function Untuk Menentukan Kelompok UKT. *Jurnal Ilmiah Informatika Global*, 112-117.
- Sahara, S. (2017). Penerapan Metode Support Vector Machine (SVM) Guna Menentukan Tingkat Lulus Mahasiswa E-Learning. *Jurnal Sistem Informasi STMIK Antar Bangsa*, 121-127.
- Sugiono. (2018). *Metode Penelitian Evaluasi*. Bandung: Alfabeta.
- Sutoyo, M. N., & Sumpala, A. T. (2017). Case Based Reasoning Menentukan Kelompok UKT (Studi Universitas Sembilan Belas November Kolaka). *Jurnal Nasional Matematika dan Aplikasinya*, 401-407.
- Suyanto. (2018). *Machine Learning Tingkat Dasar dan Lanjut*. Bandung: Informatika Bandung.
- Suyanto, D. (2019). *Data Mining Untuk Klasifikasi dan Klasterisasi Data*. Bandung: Informatika Bandung.

Suyoga, G. S., Kencana, P. E., & Sukarsa, K. G. (2017). Penggolongan Uang Kuliah Tunggal Menggunakan Support Vector Machine. *E-Jurnal Matematika*, 220-225.



## LAMPIRAN

Lampiran 1 : Tabel Ketetapan *Chi-Square*

Tabel <i>Chi-Square</i>							
$\nu$	$\alpha$ (alpha)						
	0,995	0,99	0,975	0,95	0,9	0,1	0,05
<b>1</b>	0,0000	0,0002	0,0010	0,0039	0,0158	2,7055	3,8415
<b>2</b>	0,0100	0,0201	0,0506	0,1026	0,2107	4,6052	5,9915
<b>3</b>	0,0717	0,1148	0,2158	0,3518	0,5844	6,2514	7,8147
<b>4</b>	0,2070	0,2971	0,4844	0,7107	1,0636	7,7794	9,4877
<b>5</b>	0,4117	0,5543	0,8312	1,1455	1,6103	9,2364	11,0705
<b>6</b>	0,6757	0,8721	1,2373	1,6354	2,2041	10,6446	12,5916
<b>7</b>	0,9893	1,2390	1,6899	2,1673	2,8331	12,0170	14,0671
<b>8</b>	1,3444	1,6465	2,1797	2,7326	3,4895	13,3616	15,5073
<b>9</b>	1,7349	2,0879	2,7004	3,3251	4,1682	14,6837	16,9190
<b>10</b>	2,1559	2,5582	3,2470	3,9403	4,8652	15,9872	18,3070
<b>11</b>	2,6032	3,0535	3,8157	4,5748	5,5778	17,2750	19,6751
<b>12</b>	3,0738	3,5706	4,4038	5,2260	6,3038	18,5493	21,0261
<b>13</b>	3,5650	4,1069	5,0088	5,8919	7,0415	19,8119	22,3620
<b>14</b>	4,0747	4,6604	5,6287	6,5706	7,7895	21,0641	23,6848
<b>15</b>	4,6009	5,2293	6,2621	7,2609	8,5468	22,3071	24,9958
<b>16</b>	5,1422	5,8122	6,9077	7,9616	9,3122	23,5418	26,2962
<b>17</b>	5,6972	6,4078	7,5642	8,6718	10,0852	24,7690	27,5871
<b>18</b>	6,2648	7,0149	8,2307	9,3905	10,8649	25,9894	28,8693
<b>19</b>	6,8440	7,6327	8,9065	10,1170	11,6509	27,2036	30,1435
<b>20</b>	7,4338	8,2604	9,5908	10,8508	12,4426	28,4120	31,4104
<b>21</b>	8,0337	8,8972	10,2829	11,5913	13,2396	29,6151	32,6706
<b>22</b>	8,6427	9,5425	10,9823	12,3380	14,0415	30,8133	33,9244
<b>23</b>	9,2604	10,1957	11,6886	13,0905	14,8480	32,0069	35,1725
<b>24</b>	9,8862	10,8564	12,4012	13,8484	15,6587	33,1962	36,4150
<b>25</b>	10,5197	11,5240	13,1197	14,6114	16,4734	34,3816	37,6525
<b>26</b>	11,1602	12,1981	13,8439	15,3792	17,2919	35,5632	38,8851
<b>27</b>	11,8076	12,8785	14,5734	16,1514	18,1139	36,7412	40,1133
<b>28</b>	12,4613	13,5647	15,3079	16,9279	18,9392	37,9159	41,3371
<b>29</b>	13,1211	14,2565	16,0471	17,7084	19,7677	39,0875	42,5570
<b>30</b>	13,7867	14,9535	16,7908	18,4927	20,5992	40,2560	43,7730
<b>31</b>	14,4578	15,6555	17,5387	19,2806	21,4336	41,4217	44,9853
<b>32</b>	15,1340	16,3622	18,2908	20,0719	22,2706	42,5847	46,1943
<b>33</b>	15,8153	17,0735	19,0467	20,8665	23,1102	43,7452	47,3999
<b>34</b>	16,5013	17,7891	19,8063	21,6643	23,9523	44,9032	48,6024
<b>35</b>	17,1918	18,5089	20,5694	22,4650	24,7967	46,0588	49,8018
<b>36</b>	17,8867	19,2327	21,3359	23,2686	25,6433	47,2122	50,9985
<b>37</b>	18,5858	19,9602	22,1056	24,0749	26,4921	48,3634	52,1923
<b>38</b>	19,2889	20,6914	22,8785	24,8839	27,3430	49,5126	53,3835
<b>39</b>	19,9959	21,4262	23,6543	25,6954	28,1958	50,6598	54,5722
<b>40</b>	20,7065	22,1643	24,4330	26,5093	29,0505	51,8051	55,7585
<b>41</b>	21,4208	22,9056	25,2145	27,3256	29,9071	52,9485	56,9424
<b>42</b>	22,1385	23,6501	25,9987	28,1440	30,7654	54,0902	58,1240
<b>43</b>	22,8595	24,3976	26,7854	28,9647	31,6255	55,2302	59,3035
<b>44</b>	23,5837	25,1480	27,5746	29,7875	32,4871	56,3685	60,4809

## Lampiran 2 : Perhitungan Kernel

### RBF Data *Training*

$$\text{Rumus : } \mathbf{K}(x, y) = \exp \left[ -\gamma \|x - y\|^2 \right]$$

$$K(m_2, m_2) = e^{(-1(1-1)^2 + (4-4)^2 + (2-2)^2 + (4-4)^2 + (1-1)^2)}$$

$$= e^{(-1.0)}$$

$$= e^0$$

$$= 1$$

$$K(m_2, m_{67}) = e^{(-1(1-4)^2 + (4-2)^2 + (2-8)^2 + (4-3)^2 + (1-1)^2)}$$

$$= e^{(-1.50)}$$

$$= e^{-50}$$

$$= 1,928$$

$$K(m_2, m_8) = e^{(-1(1-3)^2 + (4-3)^2 + (2-4)^2 + (4-3)^2 + (1-2)^2)}$$

$$= e^{(-1.11)}$$

$$= e^{-11}$$

$$= 0,000$$

$$K(m_2, m_{105}) = e^{(-1(1-5)^2 + (4-4)^2 + (2-2)^2 + (4-8)^2 + (1-1)^2)}$$

$$= e^{(-1.32)}$$

$$= e^{-32}$$

$$= 1,266$$

$$K(m_2, m_{136}) = e^{(-1(1-3)^2 + (4-1)^2 + (2-2)^2 + (4-8)^2 + (1-3)^2)}$$

$$= e^{(-1.33)}$$

$$= e^{-33}$$

$$= 4,658$$

$$K(m_2, m_{354}) = e^{(-1(1-4)^2 + (4-4)^2 + (2-3)^2 + (4-8)^2 + (1-2)^2)}$$

$$= e^{(-1.27)}$$

$$= e^{-27}$$

$$= 1,879$$

$$K(m_2, m_{25}) = e^{(-1(1-5)^2 + (4-4)^2 + (2-3)^2 + (4-8)^2 + (1-1)^2)}$$

$$= e^{(-1.33)}$$

$$= e^{-33}$$

$$= 4,658$$

$$K(m_2, m_{42}) = e^{(-1(1-4)^2 + (4-4)^2 + (2-4)^2 + (4-8)^2 + (1-2)^2)}$$

$$= e^{(-1.30)}$$

$$= e^{-30}$$

$$= 9,357$$

$$K(m_2, m_{127}) = e^{(-1(1-4)^2 + (4-4)^2 + (2-4)^2 + (4-8)^2 + (1-1)^2)}$$

$$= e^{(-1.29)}$$

$$= e^{-29}$$

$$= 2,543$$

$$K(m_2, m_{141}) = e^{(-1(1-5)^2 + (4-4)^2 + (2-5)^2 + (4-8)^2 + (1-1)^2)}$$

$$= e^{(-1.41)}$$

$$= e^{-41}$$

$$= 1,562$$

$$K(m_2, m_{318}) = e^{(-1(1-5)^2 + (4-5)^2 + (2-5)^2 + (4-6)^2 + (1-1)^2)}$$

$$= e^{(-1.30)}$$

$$= e^{-30}$$

$$= 9,357$$

$$K(m_2, m_{504}) = e^{(-1(1-5)^2 + (4-5)^2 + (2-4)^2 + (4-6)^2 + (1-1)^2)}$$

$$= e^{(-1.25)}$$

$$= e^{-25}$$

$$= 1,388$$

$$K(m_2, m_{45}) = e^{(-1(1-5)^2 + (4-5)^2 + (2-4)^2 + (4-8)^2 + (1-1)^2)}$$

$$= e^{(-1.37)}$$

$$= e^{-37}$$

$$= 8,533$$

$$K(m_2, m_{269}) = e^{(-1(1-4)^2 + (4-2)^2 + (2-5)^2 + (4-8)^2 + (1-1)^2)}$$

$$= e^{(-1.38)}$$

$$= e^{-38}$$

$$= 3,139$$

$$\begin{aligned}
K(m_{67}, m_2) &= e^{(-1(4-1)^2+(2-4)^2+(8-2)^2+(3-4)^2+(1-1)^2)} \\
&= e^{(-1.50)} \\
&= e^{-50} \\
&= 1,928
\end{aligned}$$

$$\begin{aligned}
K(m_{67}, m_{67}) &= e^{(-1(4-4)^2+(2-2)^2+(8-8)^2+(3-3)^2+(1-1)^2)} \\
&= e^{(-1.0)} \\
&= e^0 \\
&= 1
\end{aligned}$$

$$\begin{aligned}
K(m_{67}, m_8) &= e^{(-1(4-3)^2+(2-3)^2+(8-4)^2+(3-3)^2+(1-2)^2)} \\
&= e^{(-1.19)} \\
&= e^{-19} \\
&= 5,602
\end{aligned}$$

$$\begin{aligned}
K(m_{67}, m_{105}) &= e^{(-1(4-5)^2+(2-4)^2+(8-2)^2+(3-8)^2+(1-1)^2)} \\
&= e^{(-1.66)} \\
&= e^{-66} \\
&= 2,170
\end{aligned}$$

$$\begin{aligned}
K(m_{67}, m_{136}) &= e^{(-1(4-3)^2+(2-1)^2+(8-2)^2+(3-8)^2+(1-3)^2)} \\
&= e^{(-1.67)} \\
&= e^{-67} \\
&= 7,984
\end{aligned}$$

$$\begin{aligned}
K(m_{67}, m_{354}) &= e^{(-1(4-4)^2+(2-4)^2+(8-3)^2+(3-8)^2+(1-2)^2)} \\
&= e^{(-1.55)} \\
&= e^{-55} \\
&= 1,299
\end{aligned}$$

$$\begin{aligned}
K(m_{67}, m_{25}) &= e^{(-1(4-5)^2+(2-4)^2+(8-3)^2+(3-8)^2+(1-1)^2)} \\
&= e^{(-1.55)} \\
&= e^{-55} \\
&= 1,299
\end{aligned}$$

$$\begin{aligned}
K(m_{67}, m_{42}) &= e^{(-1(4-4)^2+(2-4)^2+(8-4)^2+(3-8)^2+(1-2)^2)} \\
&= e^{(-1.46)} \\
&= e^{-46} \\
&= 1,053
\end{aligned}$$

$$\begin{aligned}
K(m_{67}, m_{127}) &= e^{(-1(4-4)^2+(2-4)^2+(8-4)^2+(3-8)^2+(1-1)^2)} \\
&= e^{(-1.45)} \\
&= e^{-45} \\
&= 2,862
\end{aligned}$$

$$\begin{aligned}
K(m_{67}, m_{141}) &= e^{(-1(4-5)^2+(2-4)^2+(8-5)^2+(3-8)^2+(1-1)^2)} \\
&= e^{(-1.39)} \\
&= e^{-39} \\
&= 1,154
\end{aligned}$$

$$\begin{aligned}
K(m_{67}, m_{318}) &= e^{(-1(4-5)^2+(2-5)^2+(8-5)^2+(3-6)^2+(1-1)^2)} \\
&= e^{(-1.28)} \\
&= e^{-28} \\
&= 6,914
\end{aligned}$$

$$\begin{aligned}
K(m_{67}, m_{504}) &= e^{(-1(4-5)^2+(2-5)^2+(8-4)^2+(3-6)^2+(1-1)^2)} \\
&= e^{(-1.35)} \\
&= e^{-35} \\
&= 6,305
\end{aligned}$$

$$\begin{aligned}
K(m_{67}, m_{45}) &= e^{(-1(4-5)^2+(2-5)^2+(8-4)^2+(3-8)^2+(1-1)^2)} \\
&= e^{(-1.51)} \\
&= e^{-51} \\
&= 7,095
\end{aligned}$$

$$\begin{aligned}
K(m_{67}, m_{269}) &= e^{(-1(4-4)^2+(2-2)^2+(8-5)^2+(3-8)^2+(1-1)^2)} \\
&= e^{(-1.34)} \\
&= e^{-34} \\
&= 1,713
\end{aligned}$$

$$\begin{aligned}
K(m_8, m_2) &= e^{(-1(3-1)^2+(3-4)^2+(4-2)^2+(3-4)^2+(2-1)^2)} \\
&= e^{(-1.11)} \\
&= e^{-11} \\
&= 0,000
\end{aligned}$$

$$\begin{aligned}
K(m_8, m_{67}) &= e^{(-1(3-4)^2+(3-2)^2+(4-8)^2+(3-3)^2+(2-1)^2)} \\
&= e^{(-1.19)} \\
&= e^{-19} \\
&= 5,602
\end{aligned}$$

$$\begin{aligned}
K(m_8, m_8) &= e^{(-1(3-3)^2+(3-3)^2+(4-4)^2+(3-3)^2+(2-2)^2)} \\
&= e^{(-1.0)} \\
&= e^0 \\
&= 1
\end{aligned}$$

$$\begin{aligned}
K(m_8, m_{105}) &= e^{(-1(3-5)^2+(3-4)^2+(4-2)^2+(3-8)^2+(2-1)^2)} \\
&= e^{(-1.35)} \\
&= e^{-35} \\
&= 6,305
\end{aligned}$$

$$\begin{aligned}
K(m_8, m_{136}) &= e^{(-1(3-3)^2+(3-1)^2+(4-2)^2+(3-8)^2+(2-3)^2)} \\
&= e^{(-1.34)} \\
&= e^{-34} \\
&= 1,713
\end{aligned}$$

$$\begin{aligned}
K(m_8, m_{354}) &= e^{(-1(3-4)^2+(3-4)^2+(4-3)^2+(3-8)^2+(2-2)^2)} \\
&= e^{(-1.28)} \\
&= e^{-28} \\
&= 6,914
\end{aligned}$$

$$\begin{aligned}
K(m_8, m_{25}) &= e^{(-1(3-5)^2+(3-4)^2+(4-3)^2+(3-8)^2+(2-1)^2)} \\
&= e^{(-1.32)} \\
&= e^{-32} \\
&= 1,266
\end{aligned}$$

$$\begin{aligned}
K(m_8, m_{42}) &= e^{(-1(3-4)^2+(3-4)^2+(4-4)^2+(3-8)^2+(2-2)^2)} \\
&= e^{(-1.27)} \\
&= e^{-27} \\
&= 1,879
\end{aligned}$$

$$\begin{aligned}
K(m_8, m_{127}) &= e^{(-1(3-4)^2+(3-4)^2+(4-4)^2+(3-8)^2+(2-1)^2)} \\
&= e^{(-1.28)} \\
&= e^{-28} \\
&= 6,914
\end{aligned}$$

$$\begin{aligned}
K(m_8, m_{141}) &= e^{(-1(3-5)^2+(3-4)^2+(4-5)^2+(3-8)^2+(2-1)^2)} \\
&= e^{(-1.32)} \\
&= e^{-32} \\
&= 1,266
\end{aligned}$$

$$\begin{aligned}
K(m_8, m_{318}) &= e^{(-1(3-5)^2+(3-5)^2+(4-5)^2+(3-6)^2+(2-1)^2)} \\
&= e^{(-1.19)} \\
&= e^{-19} \\
&= 5,602
\end{aligned}$$

$$\begin{aligned}
K(m_8, m_{504}) &= e^{(-1(3-5)^2+(3-5)^2+(4-4)^2+(3-6)^2+(2-1)^2)} \\
&= e^{(-1.18)} \\
&= e^{-18} \\
&= 1,522
\end{aligned}$$

$$\begin{aligned}
K(m_8, m_{45}) &= e^{(-1(3-5)^2+(3-5)^2+(4-4)^2+(3-8)^2+(2-1)^2)} \\
&= e^{(-1.34)} \\
&= e^{-34} \\
&= 1,713
\end{aligned}$$

$$\begin{aligned}
K(m_8, m_{269}) &= e^{(-1(3-4)^2+(3-2)^2+(4-5)^2+(3-8)^2+(2-1)^2)} \\
&= e^{(-1.29)} \\
&= e^{-29} \\
&= 2,543
\end{aligned}$$

$$\begin{aligned}
K(m_{105}, m_2) &= e^{(-1(5-1)^2 + (4-4)^2 + (2-2)^2 + (8-4)^2 + (1-1)^2)} \\
&= e^{(-1.32)} \\
&= e^{-32} \\
&= 1,266
\end{aligned}$$

$$\begin{aligned}
K(m_{105}, m_{67}) &= e^{(-1(5-4)^2 + (4-2)^2 + (2-8)^2 + (8-3)^2 + (1-1)^2)} \\
&= e^{(-1.66)} \\
&= e^{-66} \\
&= 2,170
\end{aligned}$$

$$\begin{aligned}
K(m_{105}, m_8) &= e^{(-1(5-3)^2 + (4-3)^2 + (2-4)^2 + (8-3)^2 + (1-2)^2)} \\
&= e^{(-1.33)} \\
&= e^{-33} \\
&= 4,658
\end{aligned}$$

$$\begin{aligned}
K(m_{105}, m_{105}) &= e^{(-1(5-5)^2 + (4-4)^2 + (2-2)^2 + (8-8)^2 + (1-1)^2)} \\
&= e^{(-1.0)} \\
&= e^0 \\
&= 1
\end{aligned}$$

$$\begin{aligned}
K(m_{105}, m_{136}) &= e^{(-1(5-3)^2 + (4-1)^2 + (2-2)^2 + (8-8)^2 + (1-3)^2)} \\
&= e^{(-1.17)} \\
&= e^{-17} \\
&= 4,139
\end{aligned}$$

$$\begin{aligned}
K(m_{105}, m_{354}) &= e^{(-1(5-4)^2 + (4-4)^2 + (2-3)^2 + (8-8)^2 + (1-2)^2)} \\
&= e^{(-1.3)} \\
&= e^{-3} \\
&= 0,049
\end{aligned}$$

$$\begin{aligned}
K(m_{105}, m_{25}) &= e^{(-1(5-5)^2 + (4-4)^2 + (2-3)^2 + (8-8)^2 + (1-1)^2)} \\
&= e^{(-1.1)} \\
&= e^{-1} \\
&= 0,367
\end{aligned}$$

$$\begin{aligned}
K(m_{105}, m_{42}) &= e^{(-1(5-4)^2 + (4-4)^2 + (2-4)^2 + (8-8)^2 + (1-2)^2)} \\
&= e^{(-1.6)} \\
&= e^{-6} \\
&= 0,002
\end{aligned}$$

$$\begin{aligned}
K(m_{105}, m_{127}) &= e^{(-1(5-4)^2 + (4-4)^2 + (2-4)^2 + (8-8)^2 + (1-1)^2)} \\
&= e^{(-1.3)} \\
&= e^{-3} \\
&= 0,049
\end{aligned}$$

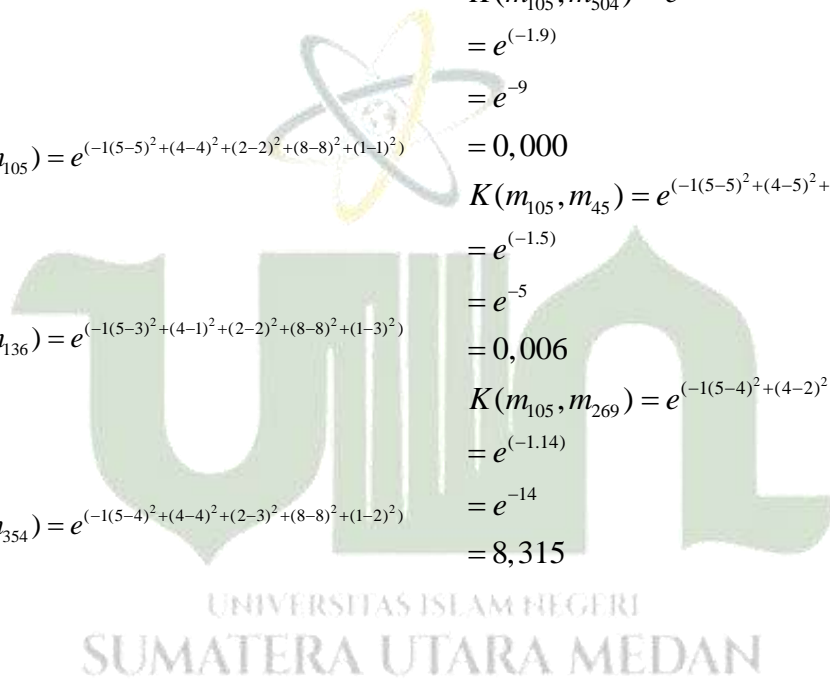
$$\begin{aligned}
K(m_{105}, m_{141}) &= e^{(-1(5-5)^2 + (4-4)^2 + (2-5)^2 + (8-8)^2 + (1-1)^2)} \\
&= e^{(-1.9)} \\
&= e^{-9} \\
&= 0,000
\end{aligned}$$

$$\begin{aligned}
K(m_{105}, m_{318}) &= e^{(-1(5-5)^2 + (4-5)^2 + (2-5)^2 + (8-6)^2 + (1-1)^2)} \\
&= e^{(-1.14)} \\
&= e^{-14} \\
&= 8,315
\end{aligned}$$

$$\begin{aligned}
K(m_{105}, m_{504}) &= e^{(-1(5-5)^2 + (4-5)^2 + (2-4)^2 + (8-6)^2 + (1-1)^2)} \\
&= e^{(-1.9)} \\
&= e^{-9} \\
&= 0,000
\end{aligned}$$

$$\begin{aligned}
K(m_{105}, m_{45}) &= e^{(-1(5-5)^2 + (4-5)^2 + (2-4)^2 + (8-8)^2 + (1-1)^2)} \\
&= e^{(-1.5)} \\
&= e^{-5} \\
&= 0,006
\end{aligned}$$

$$\begin{aligned}
K(m_{105}, m_{269}) &= e^{(-1(5-4)^2 + (4-2)^2 + (2-5)^2 + (8-8)^2 + (1-1)^2)} \\
&= e^{(-1.14)} \\
&= e^{-14} \\
&= 8,315
\end{aligned}$$



$$\begin{aligned}
K(m_{136}, m_2) &= e^{(-1(3-1)^2+(1-4)^2+(2-2)^2+(8-4)^2+(3-1)^2)} \\
&= e^{(-1.33)} \\
&= e^{-33} \\
&= 4,658
\end{aligned}$$

$$\begin{aligned}
K(m_{136}, m_{67}) &= e^{(-1(3-4)^2+(1-2)^2+(2-8)^2+(8-3)^2+(3-1)^2)} \\
&= e^{(-1.67)} \\
&= e^{-67} \\
&= 7,984
\end{aligned}$$

$$\begin{aligned}
K(m_{136}, m_8) &= e^{(-1(3-3)^2+(1-3)^2+(2-4)^2+(8-3)^2+(3-2)^2)} \\
&= e^{(-1.34)} \\
&= e^{-34} \\
&= 1,713
\end{aligned}$$

$$\begin{aligned}
K(m_{136}, m_{105}) &= e^{(-1(3-5)^2+(1-4)^2+(2-2)^2+(8-8)^2+(3-1)^2)} \\
&= e^{(-1.17)} \\
&= e^{-17} \\
&= 4,139
\end{aligned}$$

$$\begin{aligned}
K(m_{136}, m_{136}) &= e^{(-1(3-3)^2+(1-1)^2+(2-2)^2+(8-8)^2+(3-3)^2)} \\
&= e^{(-1.0)} \\
&= e^0 \\
&= 1
\end{aligned}$$

$$\begin{aligned}
K(m_{136}, m_{354}) &= e^{(-1(3-4)^2+(1-4)^2+(2-3)^2+(8-8)^2+(3-2)^2)} \\
&= e^{(-1.12)} \\
&= e^{-12} \\
&= 0,000
\end{aligned}$$

$$\begin{aligned}
K(m_{136}, m_{25}) &= e^{(-1(3-5)^2+(1-4)^2+(2-3)^2+(8-8)^2+(3-1)^2)} \\
&= e^{(-1.18)} \\
&= e^{-18} \\
&= 1,522
\end{aligned}$$

$$\begin{aligned}
K(m_{136}, m_{42}) &= e^{(-1(3-4)^2+(1-4)^2+(2-4)^2+(8-8)^2+(3-2)^2)} \\
&= e^{(-1.15)} \\
&= e^{-15} \\
&= 3,059
\end{aligned}$$

$$\begin{aligned}
K(m_{136}, m_{127}) &= e^{(-1(3-4)^2+(1-4)^2+(2-4)^2+(8-8)^2+(3-1)^2)} \\
&= e^{(-1.18)} \\
&= e^{-18} \\
&= 1,522
\end{aligned}$$

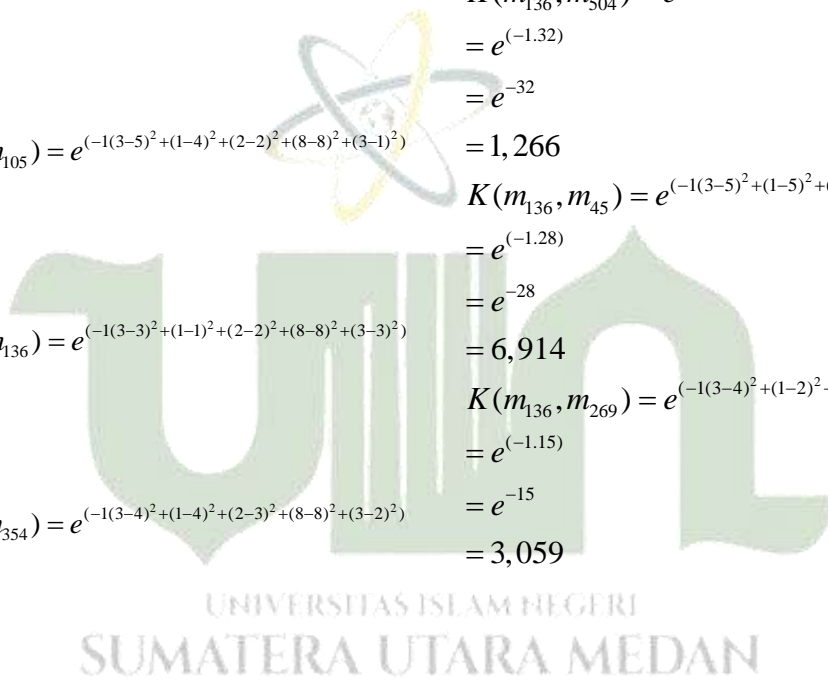
$$\begin{aligned}
K(m_{136}, m_{141}) &= e^{(-1(3-5)^2+(1-4)^2+(2-5)^2+(8-8)^2+(3-1)^2)} \\
&= e^{(-1.26)} \\
&= e^{-26} \\
&= 5,109
\end{aligned}$$

$$\begin{aligned}
K(m_{136}, m_{318}) &= e^{(-1(3-5)^2+(1-5)^2+(2-5)^2+(8-6)^2+(3-1)^2)} \\
&= e^{(-1.37)} \\
&= e^{-37} \\
&= 8,533
\end{aligned}$$

$$\begin{aligned}
K(m_{136}, m_{504}) &= e^{(-1(3-5)^2+(1-5)^2+(2-4)^2+(8-6)^2+(3-1)^2)} \\
&= e^{(-1.32)} \\
&= e^{-32} \\
&= 1,266
\end{aligned}$$

$$\begin{aligned}
K(m_{136}, m_{45}) &= e^{(-1(3-5)^2+(1-5)^2+(2-4)^2+(8-8)^2+(3-1)^2)} \\
&= e^{(-1.28)} \\
&= e^{-28} \\
&= 6,914
\end{aligned}$$

$$\begin{aligned}
K(m_{136}, m_{269}) &= e^{(-1(3-4)^2+(1-2)^2+(2-5)^2+(8-8)^2+(3-1)^2)} \\
&= e^{(-1.15)} \\
&= e^{-15} \\
&= 3,059
\end{aligned}$$





$$\begin{aligned}
 K(m_{354}, m_2) &= e^{(-1(4-1)^2+(4-4)^2+(3-2)^2+(8-4)^2+(2-1)^2)} \\
 &= e^{(-1.27)} \\
 &= e^{-27} \\
 &= 1,879
 \end{aligned}$$

$$\begin{aligned}
 K(m_{354}, m_{67}) &= e^{(-1(4-4)^2+(4-2)^2+(3-8)^2+(8-3)^2+(2-1)^2)} \\
 &= e^{(-1.55)} \\
 &= e^{-55} \\
 &= 1,299
 \end{aligned}$$

$$\begin{aligned}
 K(m_{354}, m_8) &= e^{(-1(4-3)^2+(4-3)^2+(3-4)^2+(8-3)^2+(2-2)^2)} \\
 &= e^{(-1.28)} \\
 &= e^{-28} \\
 &= 6,914
 \end{aligned}$$

$$\begin{aligned}
 K(m_{354}, m_{105}) &= e^{(-1(4-5)^2+(4-4)^2+(3-2)^2+(8-8)^2+(2-1)^2)} \\
 &= e^{(-1.3)} \\
 &= e^{-3} \\
 &= 0,049
 \end{aligned}$$

$$\begin{aligned}
 K(m_{354}, m_{136}) &= e^{(-1(4-3)^2+(4-1)^2+(3-2)^2+(8-8)^2+(2-3)^2)} \\
 &= e^{(-1.12)} \\
 &= e^{-12} \\
 &= 0,000
 \end{aligned}$$

$$\begin{aligned}
 K(m_{354}, m_{354}) &= e^{(-1(4-4)^2+(4-4)^2+(3-3)^2+(8-8)^2+(2-2)^2)} \\
 &= e^{(-1.0)} \\
 &= e^0 \\
 &= 1
 \end{aligned}$$

$$\begin{aligned}
 K(m_{354}, m_{25}) &= e^{(-1(4-5)^2+(4-4)^2+(3-3)^2+(8-8)^2+(2-1)^2)} \\
 &= e^{(-1.2)} \\
 &= e^{-2} \\
 &= 0,135
 \end{aligned}$$

$$\begin{aligned}
 K(m_{354}, m_{42}) &= e^{(-1(4-4)^2+(4-4)^2+(3-4)^2+(8-8)^2+(2-2)^2)} \\
 &= e^{(-1.1)} \\
 &= e^{-1} \\
 &= 0,367
 \end{aligned}$$

$$\begin{aligned}
 K(m_{354}, m_{127}) &= e^{(-1(4-4)^2+(4-4)^2+(3-4)^2+(8-8)^2+(2-1)^2)} \\
 &= e^{(-1.2)} \\
 &= e^{-2} \\
 &= 0,135
 \end{aligned}$$

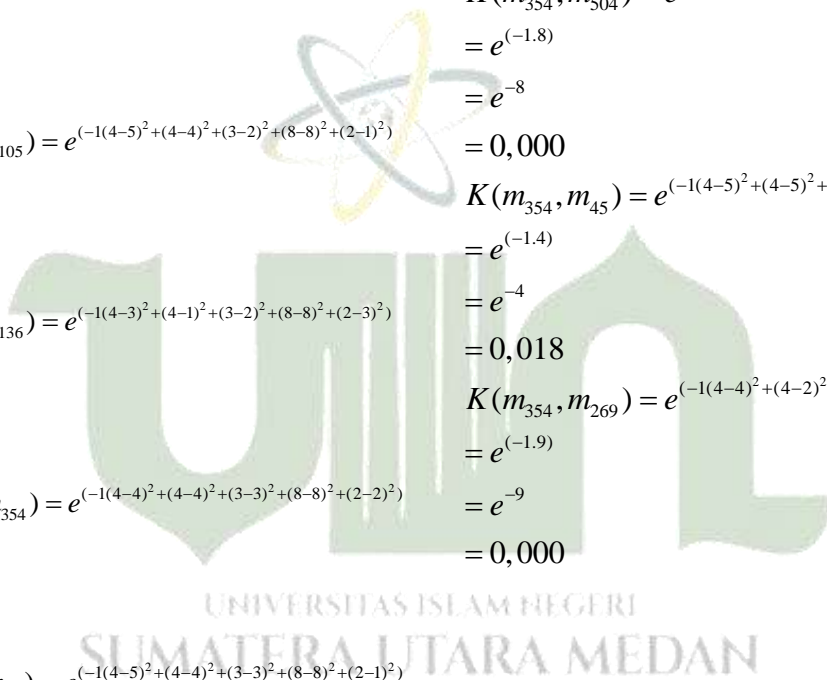
$$\begin{aligned}
 K(m_{354}, m_{141}) &= e^{(-1(4-5)^2+(4-4)^2+(3-5)^2+(8-8)^2+(2-1)^2)} \\
 &= e^{(-1.6)} \\
 &= e^{-6} \\
 &= 0,002
 \end{aligned}$$

$$\begin{aligned}
 K(m_{354}, m_{318}) &= e^{(-1(4-5)^2+(4-5)^2+(3-5)^2+(8-6)^2+(2-1)^2)} \\
 &= e^{(-1.11)} \\
 &= e^{-11} \\
 &= 0,000
 \end{aligned}$$

$$\begin{aligned}
 K(m_{354}, m_{504}) &= e^{(-1(4-5)^2+(4-5)^2+(3-4)^2+(8-6)^2+(2-1)^2)} \\
 &= e^{(-1.8)} \\
 &= e^{-8} \\
 &= 0,000
 \end{aligned}$$

$$\begin{aligned}
 K(m_{354}, m_{45}) &= e^{(-1(4-5)^2+(4-5)^2+(3-4)^2+(8-8)^2+(2-1)^2)} \\
 &= e^{(-1.4)} \\
 &= e^{-4} \\
 &= 0,018
 \end{aligned}$$

$$\begin{aligned}
 K(m_{354}, m_{269}) &= e^{(-1(4-4)^2+(4-2)^2+(3-5)^2+(8-8)^2+(2-1)^2)} \\
 &= e^{(-1.9)} \\
 &= e^{-9} \\
 &= 0,000
 \end{aligned}$$



$$\begin{aligned}
K(m_{25}, m_2) &= e^{(-1(5-1)^2+(4-4)^2+(3-2)^2+(8-4)^2+(1-1)^2)} \\
&= e^{(-1.33)} \\
&= e^{-33} \\
&= 4,658
\end{aligned}$$

$$\begin{aligned}
K(m_{25}, m_{67}) &= e^{(-1(5-4)^2+(4-2)^2+(3-8)^2+(8-3)^2+(1-1)^2)} \\
&= e^{(-1.55)} \\
&= e^{-55} \\
&= 1,299
\end{aligned}$$

$$\begin{aligned}
K(m_{25}, m_8) &= e^{(-1(5-3)^2+(4-3)^2+(3-4)^2+(8-3)^2+(1-2)^2)} \\
&= e^{(-1.32)} \\
&= e^{-32} \\
&= 1,266
\end{aligned}$$

$$\begin{aligned}
K(m_{25}, m_{105}) &= e^{(-1(5-5)^2+(4-4)^2+(3-2)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.1)} \\
&= e^{-1} \\
&= 0,367
\end{aligned}$$

$$\begin{aligned}
K(m_{25}, m_{136}) &= e^{(-1(5-3)^2+(4-1)^2+(3-2)^2+(8-8)^2+(1-3)^2)} \\
&= e^{(-1.23)} \\
&= e^{-23} \\
&= 1,026
\end{aligned}$$

$$\begin{aligned}
K(m_{25}, m_{354}) &= e^{(-1(5-4)^2+(4-4)^2+(3-3)^2+(8-8)^2+(1-2)^2)} \\
&= e^{(-1.2)} \\
&= e^{-2} \\
&= 0,135
\end{aligned}$$

$$\begin{aligned}
K(m_{25}, m_{25}) &= e^{(-1(5-5)^2+(4-4)^2+(3-3)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.0)} \\
&= e^0 \\
&= 1
\end{aligned}$$

$$\begin{aligned}
K(m_{25}, m_{42}) &= e^{(-1(5-4)^2+(4-4)^2+(3-4)^2+(8-8)^2+(1-2)^2)} \\
&= e^{(-1.3)} \\
&= e^{-3} \\
&= 0,049
\end{aligned}$$

$$\begin{aligned}
K(m_{25}, m_{127}) &= e^{(-1(5-4)^2+(4-4)^2+(3-4)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.2)} \\
&= e^{-2} \\
&= 0,135
\end{aligned}$$

$$\begin{aligned}
K(m_{25}, m_{141}) &= e^{(-1(5-5)^2+(4-4)^2+(3-5)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.4)} \\
&= e^{-4} \\
&= 0,018
\end{aligned}$$

$$\begin{aligned}
K(m_{25}, m_{318}) &= e^{(-1(5-5)^2+(4-5)^2+(3-5)^2+(8-6)^2+(1-1)^2)} \\
&= e^{(-1.9)} \\
&= e^{-9} \\
&= 0,000
\end{aligned}$$

$$\begin{aligned}
K(m_{25}, m_{504}) &= e^{(-1(5-5)^2+(4-5)^2+(3-4)^2+(8-6)^2+(1-1)^2)} \\
&= e^{(-1.6)} \\
&= e^{-6} \\
&= 0,002
\end{aligned}$$

$$\begin{aligned}
K(m_{25}, m_{45}) &= e^{(-1(5-5)^2+(4-5)^2+(3-4)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.2)} \\
&= e^{-2} \\
&= 0,135
\end{aligned}$$

$$\begin{aligned}
K(m_{25}, m_{269}) &= e^{(-1(5-4)^2+(4-2)^2+(3-5)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.9)} \\
&= e^{-9} \\
&= 0,000
\end{aligned}$$

$$\begin{aligned}
K(m_{42}, m_2) &= e^{(-1(4-1)^2+(4-4)^2+(4-2)^2+(8-4)^2+(2-1)^2)} \\
&= e^{(-1.30)} \\
&= e^{-30} \\
&= 9,357
\end{aligned}$$

$$\begin{aligned}
K(m_{42}, m_{67}) &= e^{(-1(4-4)^2+(4-2)^2+(4-8)^2+(8-3)^2+(2-1)^2)} \\
&= e^{(-1.46)} \\
&= e^{-46} \\
&= 1,053
\end{aligned}$$

$$\begin{aligned}
K(m_{42}, m_8) &= e^{(-1(4-3)^2+(4-3)^2+(4-4)^2+(8-3)^2+(2-2)^2)} \\
&= e^{(-1.27)} \\
&= e^{-27} \\
&= 1,879
\end{aligned}$$

$$\begin{aligned}
K(m_{42}, m_{105}) &= e^{(-1(4-5)^2+(4-4)^2+(4-2)^2+(8-8)^2+(2-1)^2)} \\
&= e^{(-1.6)} \\
&= e^{-6} \\
&= 0,002
\end{aligned}$$

$$\begin{aligned}
K(m_{42}, m_{136}) &= e^{(-1(4-3)^2+(4-1)^2+(4-2)^2+(8-8)^2+(2-3)^2)} \\
&= e^{(-1.15)} \\
&= e^{-15} \\
&= 3,059
\end{aligned}$$

$$\begin{aligned}
K(m_{42}, m_{354}) &= e^{(-1(4-4)^2+(4-4)^2+(4-3)^2+(8-8)^2+(2-2)^2)} \\
&= e^{(-1.1)} \\
&= e^{-1} \\
&= 0,367
\end{aligned}$$

$$\begin{aligned}
K(m_{42}, m_{25}) &= e^{(-1(4-5)^2+(4-4)^2+(4-3)^2+(8-8)^2+(2-1)^2)} \\
&= e^{(-1.3)} \\
&= e^{-3} \\
&= 0,049
\end{aligned}$$

$$\begin{aligned}
K(m_{42}, m_{42}) &= e^{(-1(4-4)^2+(4-4)^2+(4-4)^2+(8-8)^2+(2-2)^2)} \\
&= e^{(-1.0)} \\
&= e^0 \\
&= 1
\end{aligned}$$

$$\begin{aligned}
K(m_{42}, m_{127}) &= e^{(-1(4-4)^2+(4-4)^2+(4-4)^2+(8-8)^2+(2-1)^2)} \\
&= e^{(-1.1)} \\
&= e^{-1} \\
&= 0,367
\end{aligned}$$

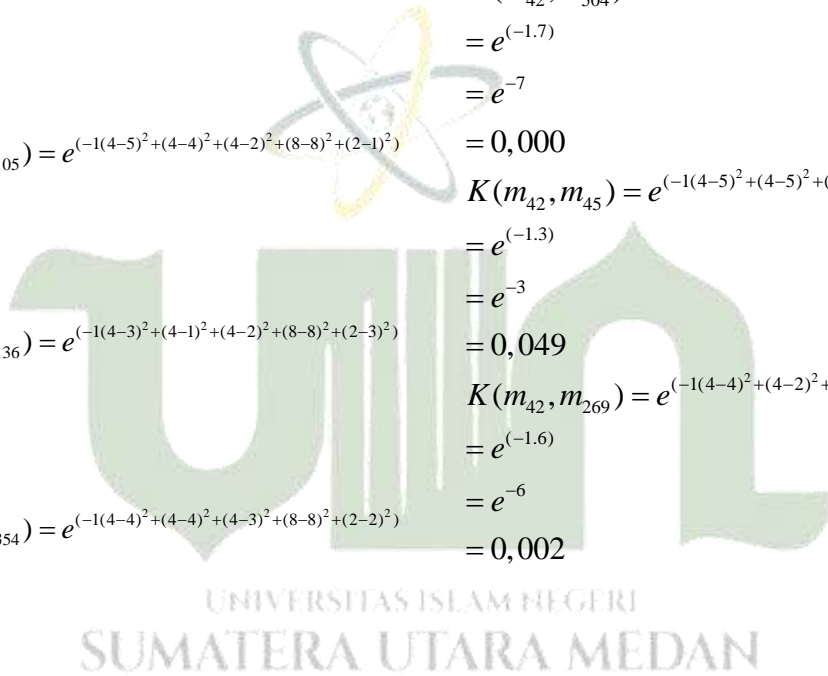
$$\begin{aligned}
K(m_{42}, m_{141}) &= e^{(-1(4-5)^2+(4-4)^2+(4-5)^2+(8-8)^2+(2-1)^2)} \\
&= e^{(-1.3)} \\
&= e^{-3} \\
&= 0,049
\end{aligned}$$

$$\begin{aligned}
K(m_{42}, m_{318}) &= e^{(-1(4-5)^2+(4-5)^2+(4-5)^2+(8-6)^2+(2-1)^2)} \\
&= e^{(-1.8)} \\
&= e^{-8} \\
&= 0,000
\end{aligned}$$

$$\begin{aligned}
K(m_{42}, m_{504}) &= e^{(-1(4-5)^2+(4-5)^2+(4-4)^2+(8-6)^2+(2-1)^2)} \\
&= e^{(-1.7)} \\
&= e^{-7} \\
&= 0,000
\end{aligned}$$

$$\begin{aligned}
K(m_{42}, m_{45}) &= e^{(-1(4-5)^2+(4-5)^2+(4-4)^2+(8-8)^2+(2-1)^2)} \\
&= e^{(-1.3)} \\
&= e^{-3} \\
&= 0,049
\end{aligned}$$

$$\begin{aligned}
K(m_{42}, m_{269}) &= e^{(-1(4-4)^2+(4-2)^2+(4-5)^2+(8-8)^2+(2-1)^2)} \\
&= e^{(-1.6)} \\
&= e^{-6} \\
&= 0,002
\end{aligned}$$



$$\begin{aligned}
K(m_{127}, m_2) &= e^{(-1(4-1)^2+(4-4)^2+(4-2)^2+(8-4)^2+(1-1)^2)} \\
&= e^{(-1.29)} \\
&= e^{-29} \\
&= 2,543
\end{aligned}$$

$$\begin{aligned}
K(m_{127}, m_{67}) &= e^{(-1(4-4)^2+(4-2)^2+(4-8)^2+(8-3)^2+(1-1)^2)} \\
&= e^{(-1.45)} \\
&= e^{-45} \\
&= 2,862
\end{aligned}$$

$$\begin{aligned}
K(m_{127}, m_8) &= e^{(-1(4-3)^2+(4-3)^2+(4-4)^2+(8-3)^2+(1-2)^2)} \\
&= e^{(-1.28)} \\
&= e^{-28} \\
&= 6,914
\end{aligned}$$

$$\begin{aligned}
K(m_{127}, m_{105}) &= e^{(-1(4-5)^2+(4-4)^2+(4-2)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.5)} \\
&= e^{-5} \\
&= 0,006
\end{aligned}$$

$$\begin{aligned}
K(m_{127}, m_{136}) &= e^{(-1(4-3)^2+(4-1)^2+(4-2)^2+(8-8)^2+(1-3)^2)} \\
&= e^{(-1.18)} \\
&= e^{-18} \\
&= 1,522
\end{aligned}$$

$$\begin{aligned}
K(m_{127}, m_{354}) &= e^{(-1(4-4)^2+(4-4)^2+(4-3)^2+(8-8)^2+(1-2)^2)} \\
&= e^{(-1.2)} \\
&= e^{-2} \\
&= 0,135
\end{aligned}$$

$$\begin{aligned}
K(m_{127}, m_{25}) &= e^{(-1(4-5)^2+(4-4)^2+(4-3)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.2)} \\
&= e^{-2} \\
&= 0,135
\end{aligned}$$

$$\begin{aligned}
K(m_{127}, m_{42}) &= e^{(-1(4-4)^2+(4-4)^2+(4-4)^2+(8-8)^2+(1-2)^2)} \\
&= e^{(-1.1)} \\
&= e^{-1} \\
&= 0,367
\end{aligned}$$

$$\begin{aligned}
K(m_{127}, m_{127}) &= e^{(-1(4-4)^2+(4-4)^2+(4-4)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.0)} \\
&= e^0 \\
&= 1
\end{aligned}$$

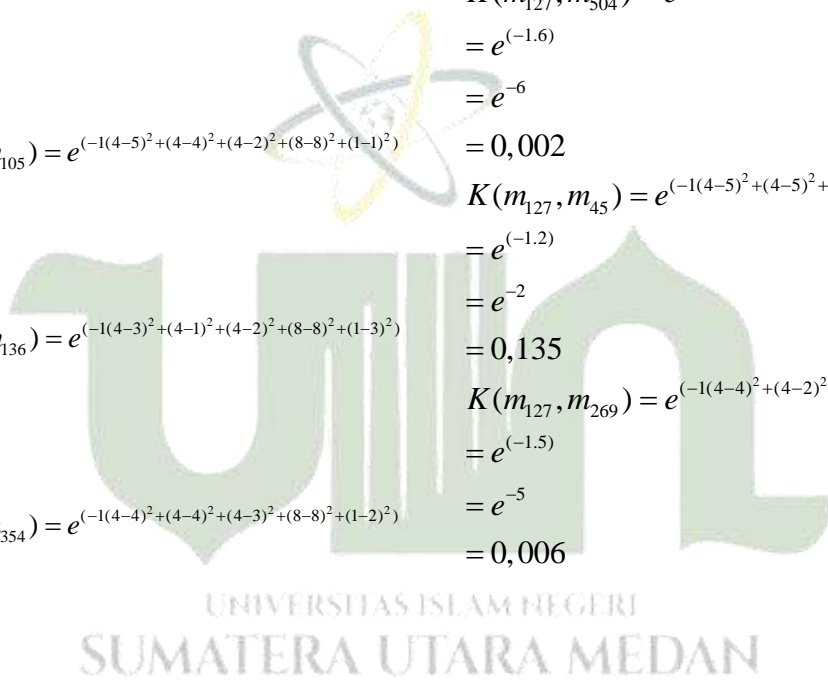
$$\begin{aligned}
K(m_{127}, m_{141}) &= e^{(-1(4-5)^2+(4-4)^2+(4-5)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.2)} \\
&= e^{-2} \\
&= 0,135
\end{aligned}$$

$$\begin{aligned}
K(m_{127}, m_{318}) &= e^{(-1(4-5)^2+(4-5)^2+(4-5)^2+(8-6)^2+(1-1)^2)} \\
&= e^{(-1.7)} \\
&= e^{-7} \\
&= 0,000
\end{aligned}$$

$$\begin{aligned}
K(m_{127}, m_{504}) &= e^{(-1(4-5)^2+(4-5)^2+(4-4)^2+(8-6)^2+(1-1)^2)} \\
&= e^{(-1.6)} \\
&= e^{-6} \\
&= 0,002
\end{aligned}$$

$$\begin{aligned}
K(m_{127}, m_{45}) &= e^{(-1(4-5)^2+(4-5)^2+(4-4)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.2)} \\
&= e^{-2} \\
&= 0,135
\end{aligned}$$

$$\begin{aligned}
K(m_{127}, m_{269}) &= e^{(-1(4-4)^2+(4-2)^2+(4-5)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.5)} \\
&= e^{-5} \\
&= 0,006
\end{aligned}$$



$$\begin{aligned}
K(m_{141}, m_2) &= e^{(-1(5-1)^2+(4-4)^2+(5-2)^2+(8-4)^2+(1-1)^2)} \\
&= e^{(-1.41)} \\
&= e^{-41} \\
&= 1,562
\end{aligned}$$

$$\begin{aligned}
K(m_{141}, m_{67}) &= e^{(-1(5-4)^2+(4-2)^2+(5-8)^2+(8-3)^2+(1-1)^2)} \\
&= e^{(-1.39)} \\
&= e^{-39} \\
&= 1,154
\end{aligned}$$

$$\begin{aligned}
K(m_{141}, m_8) &= e^{(-1(5-3)^2+(4-3)^2+(5-4)^2+(8-3)^2+(1-2)^2)} \\
&= e^{(-1.32)} \\
&= e^{-32} \\
&= 1,266
\end{aligned}$$

$$\begin{aligned}
K(m_{141}, m_{105}) &= e^{(-1(5-5)^2+(4-4)^2+(5-2)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.9)} \\
&= e^{-9} \\
&= 0,000
\end{aligned}$$

$$\begin{aligned}
K(m_{141}, m_{136}) &= e^{(-1(5-3)^2+(4-1)^2+(5-2)^2+(8-8)^2+(1-3)^2)} \\
&= e^{(-1.26)} \\
&= e^{-26} \\
&= 5,109
\end{aligned}$$

$$\begin{aligned}
K(m_{141}, m_{354}) &= e^{(-1(5-4)^2+(4-4)^2+(5-3)^2+(8-8)^2+(1-2)^2)} \\
&= e^{(-1.6)} \\
&= e^{-6} \\
&= 0,002
\end{aligned}$$

$$\begin{aligned}
K(m_{141}, m_{25}) &= e^{(-1(5-5)^2+(4-4)^2+(5-3)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.4)} \\
&= e^{-4} \\
&= 0,018
\end{aligned}$$

$$\begin{aligned}
K(m_{141}, m_{42}) &= e^{(-1(5-4)^2+(4-4)^2+(5-4)^2+(8-8)^2+(1-2)^2)} \\
&= e^{(-1.3)} \\
&= e^{-3} \\
&= 0,049
\end{aligned}$$

$$\begin{aligned}
K(m_{141}, m_{127}) &= e^{(-1(5-4)^2+(4-4)^2+(5-4)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.2)} \\
&= e^{-2} \\
&= 0,135
\end{aligned}$$

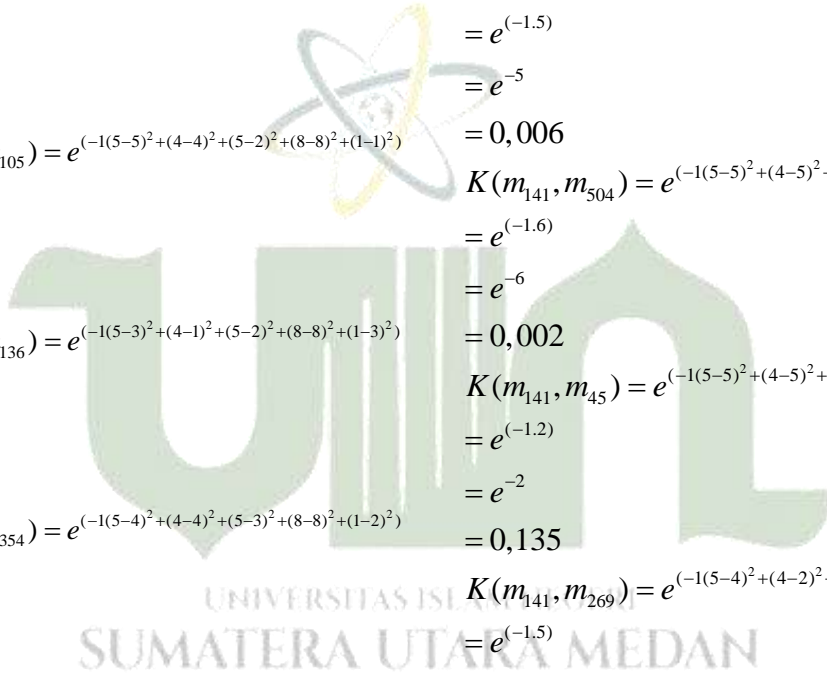
$$\begin{aligned}
K(m_{141}, m_{141}) &= e^{(-1(5-5)^2+(4-4)^2+(5-5)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.0)} \\
&= e^0 \\
&= 1
\end{aligned}$$

$$\begin{aligned}
K(m_{141}, m_{318}) &= e^{(-1(5-5)^2+(4-5)^2+(5-5)^2+(8-6)^2+(1-1)^2)} \\
&= e^{(-1.5)} \\
&= e^{-5} \\
&= 0,006
\end{aligned}$$

$$\begin{aligned}
K(m_{141}, m_{504}) &= e^{(-1(5-5)^2+(4-5)^2+(5-4)^2+(8-6)^2+(1-1)^2)} \\
&= e^{(-1.6)} \\
&= e^{-6} \\
&= 0,002
\end{aligned}$$

$$\begin{aligned}
K(m_{141}, m_{45}) &= e^{(-1(5-5)^2+(4-5)^2+(5-4)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.2)} \\
&= e^{-2} \\
&= 0,135
\end{aligned}$$

$$\begin{aligned}
K(m_{141}, m_{269}) &= e^{(-1(5-4)^2+(4-2)^2+(5-5)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.5)} \\
&= e^{-5} \\
&= 0,006
\end{aligned}$$



$$\begin{aligned}
K(m_{318}, m_2) &= e^{(-1(5-1)^2+(5-4)^2+(5-2)^2+(6-4)^2+(1-1)^2)} \\
&= e^{(-1.30)} \\
&= e^{-30} \\
&= 9,357
\end{aligned}$$

$$\begin{aligned}
K(m_{318}, m_{67}) &= e^{(-1(5-4)^2+(5-2)^2+(5-8)^2+(6-3)^2+(1-1)^2)} \\
&= e^{(-1.28)} \\
&= e^{-28} \\
&= 6,914
\end{aligned}$$

$$\begin{aligned}
K(m_{318}, m_8) &= e^{(-1(5-3)^2+(5-3)^2+(5-4)^2+(6-3)^2+(1-2)^2)} \\
&= e^{(-1.19)} \\
&= e^{-19} \\
&= 5,602
\end{aligned}$$

$$\begin{aligned}
K(m_{318}, m_{105}) &= e^{(-1(5-5)^2+(5-4)^2+(5-2)^2+(6-8)^2+(1-1)^2)} \\
&= e^{(-1.14)} \\
&= e^{-14} \\
&= 8,315
\end{aligned}$$

$$\begin{aligned}
K(m_{318}, m_{136}) &= e^{(-1(5-3)^2+(5-1)^2+(5-2)^2+(6-8)^2+(1-3)^2)} \\
&= e^{(-1.37)} \\
&= e^{-37} \\
&= 8,533
\end{aligned}$$

$$\begin{aligned}
K(m_{318}, m_{354}) &= e^{(-1(5-4)^2+(5-4)^2+(5-3)^2+(6-8)^2+(1-2)^2)} \\
&= e^{(-1.11)} \\
&= e^{-11} \\
&= 0,000
\end{aligned}$$

$$\begin{aligned}
K(m_{318}, m_{25}) &= e^{(-1(5-5)^2+(5-4)^2+(5-3)^2+(6-8)^2+(1-1)^2)} \\
&= e^{(-1.9)} \\
&= e^{-9} \\
&= 0,000
\end{aligned}$$

$$\begin{aligned}
K(m_{318}, m_{42}) &= e^{(-1(5-4)^2+(5-4)^2+(5-4)^2+(6-8)^2+(1-2)^2)} \\
&= e^{(-1.8)} \\
&= e^{-8} \\
&= 0,000
\end{aligned}$$

$$\begin{aligned}
K(m_{318}, m_{127}) &= e^{(-1(5-4)^2+(5-4)^2+(5-4)^2+(6-8)^2+(1-1)^2)} \\
&= e^{(-1.7)} \\
&= e^{-7} \\
&= 0,000
\end{aligned}$$

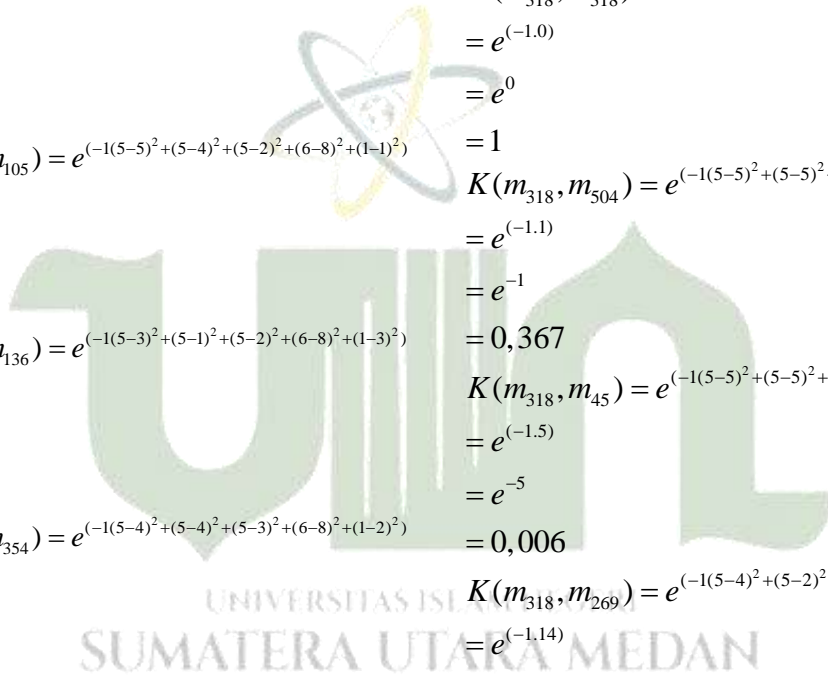
$$\begin{aligned}
K(m_{318}, m_{141}) &= e^{(-1(5-5)^2+(5-4)^2+(5-5)^2+(6-8)^2+(1-1)^2)} \\
&= e^{(-1.5)} \\
&= e^{-5} \\
&= 0,006
\end{aligned}$$

$$\begin{aligned}
K(m_{318}, m_{318}) &= e^{(-1(5-5)^2+(5-5)^2+(5-5)^2+(6-6)^2+(1-1)^2)} \\
&= e^{(-1.0)} \\
&= e^0 \\
&= 1
\end{aligned}$$

$$\begin{aligned}
K(m_{318}, m_{504}) &= e^{(-1(5-5)^2+(5-5)^2+(5-4)^2+(6-6)^2+(1-1)^2)} \\
&= e^{(-1.1)} \\
&= e^{-1} \\
&= 0,367
\end{aligned}$$

$$\begin{aligned}
K(m_{318}, m_{45}) &= e^{(-1(5-5)^2+(5-5)^2+(5-4)^2+(6-8)^2+(1-1)^2)} \\
&= e^{(-1.5)} \\
&= e^{-5} \\
&= 0,006
\end{aligned}$$

$$\begin{aligned}
K(m_{318}, m_{269}) &= e^{(-1(5-4)^2+(5-2)^2+(5-5)^2+(6-8)^2+(1-1)^2)} \\
&= e^{(-1.14)} \\
&= e^{-14} \\
&= 8,315
\end{aligned}$$



$$\begin{aligned}
K(m_{504}, m_2) &= e^{(-1(5-1)^2+(5-4)^2+(4-2)^2+(6-4)^2+(1-1)^2)} \\
&= e^{(-1.25)} \\
&= e^{-25} \\
&= 1,388
\end{aligned}$$

$$\begin{aligned}
K(m_{504}, m_{67}) &= e^{(-1(5-4)^2+(5-2)^2+(4-8)^2+(6-3)^2+(1-1)^2)} \\
&= e^{(-1.35)} \\
&= e^{-35} \\
&= 6,305
\end{aligned}$$

$$\begin{aligned}
K(m_{504}, m_8) &= e^{(-1(5-3)^2+(5-3)^2+(4-4)^2+(6-3)^2+(1-2)^2)} \\
&= e^{(-1.18)} \\
&= e^{-18} \\
&= 1,522
\end{aligned}$$

$$\begin{aligned}
K(m_{504}, m_{105}) &= e^{(-1(5-5)^2+(5-4)^2+(4-2)^2+(6-8)^2+(1-1)^2)} \\
&= e^{(-1.9)} \\
&= e^{-9} \\
&= 0,000
\end{aligned}$$

$$\begin{aligned}
K(m_{504}, m_{136}) &= e^{(-1(5-3)^2+(5-1)^2+(4-2)^2+(6-8)^2+(1-3)^2)} \\
&= e^{(-1.17)} \\
&= e^{-17} \\
&= 4,139
\end{aligned}$$

$$\begin{aligned}
K(m_{504}, m_{354}) &= e^{(-1(5-4)^2+(5-4)^2+(4-3)^2+(6-8)^2+(1-2)^2)} \\
&= e^{(-1.8)} \\
&= e^{-8} \\
&= 0,000
\end{aligned}$$

$$\begin{aligned}
K(m_{504}, m_{25}) &= e^{(-1(5-5)^2+(5-4)^2+(4-3)^2+(6-8)^2+(1-1)^2)} \\
&= e^{(-1.6)} \\
&= e^{-6} \\
&= 0,002
\end{aligned}$$

$$\begin{aligned}
K(m_{504}, m_{42}) &= e^{(-1(5-4)^2+(5-4)^2+(4-4)^2+(6-8)^2+(1-2)^2)} \\
&= e^{(-1.7)} \\
&= e^{-7} \\
&= 0,000
\end{aligned}$$

$$\begin{aligned}
K(m_{504}, m_{127}) &= e^{(-1(5-4)^2+(5-4)^2+(4-4)^2+(6-8)^2+(1-1)^2)} \\
&= e^{(-1.6)} \\
&= e^{-6} \\
&= 0,002
\end{aligned}$$

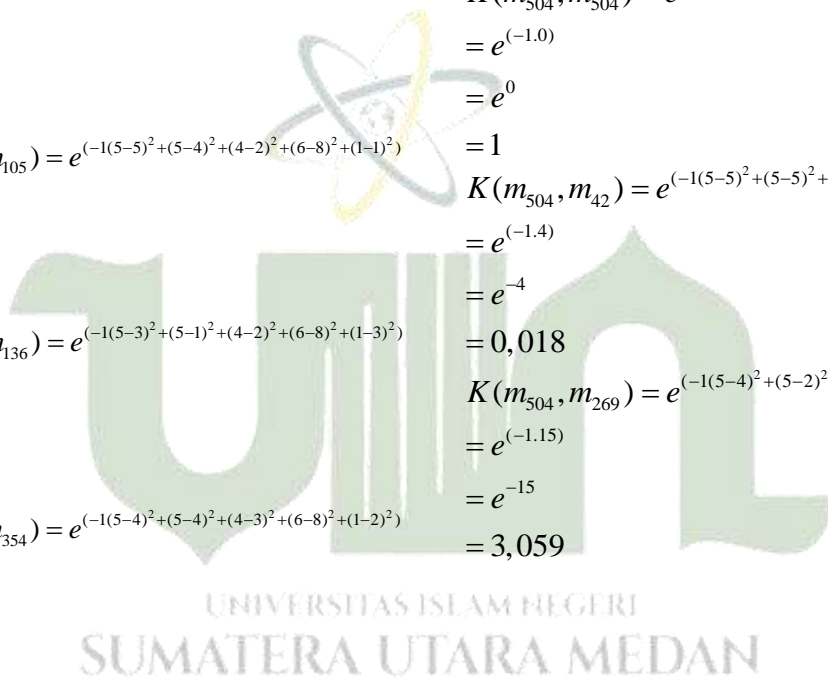
$$\begin{aligned}
K(m_{504}, m_{141}) &= e^{(-1(5-5)^2+(5-4)^2+(4-5)^2+(6-8)^2+(1-1)^2)} \\
&= e^{(-1.6)} \\
&= e^{-6} \\
&= 0,002
\end{aligned}$$

$$\begin{aligned}
K(m_{504}, m_{318}) &= e^{(-1(5-5)^2+(5-5)^2+(4-5)^2+(6-6)^2+(1-1)^2)} \\
&= e^{(-1.1)} \\
&= e^{-1} \\
&= 0,367
\end{aligned}$$

$$\begin{aligned}
K(m_{504}, m_{504}) &= e^{(-1(5-5)^2+(5-5)^2+(4-4)^2+(6-6)^2+(1-1)^2)} \\
&= e^{(-1.0)} \\
&= e^0 \\
&= 1
\end{aligned}$$

$$\begin{aligned}
K(m_{504}, m_{42}) &= e^{(-1(5-5)^2+(5-5)^2+(4-4)^2+(6-8)^2+(1-1)^2)} \\
&= e^{(-1.4)} \\
&= e^{-4} \\
&= 0,018
\end{aligned}$$

$$\begin{aligned}
K(m_{504}, m_{269}) &= e^{(-1(5-4)^2+(5-2)^2+(4-5)^2+(6-8)^2+(1-1)^2)} \\
&= e^{(-1.15)} \\
&= e^{-15} \\
&= 3,059
\end{aligned}$$



$$\begin{aligned}
 K(m_{45}, m_2) &= e^{(-1(5-1)^2+(5-4)^2+(4-2)^2+(8-4)^2+(1-1)^2)} \\
 &= e^{(-1.37)} \\
 &= e^{-37} \\
 &= 8,533
 \end{aligned}$$

$$\begin{aligned}
 K(m_{45}, m_{67}) &= e^{(-1(5-4)^2+(5-2)^2+(4-8)^2+(8-3)^2+(1-1)^2)} \\
 &= e^{(-1.51)} \\
 &= e^{-51} \\
 &= 7,095
 \end{aligned}$$

$$\begin{aligned}
 K(m_{45}, m_8) &= e^{(-1(5-3)^2+(5-3)^2+(4-4)^2+(8-3)^2+(1-1)^2)} \\
 &= e^{(-1.33)} \\
 &= e^{-33} \\
 &= 4,658
 \end{aligned}$$

$$\begin{aligned}
 K(m_{45}, m_{105}) &= e^{(-1(5-5)^2+(5-4)^2+(4-2)^2+(8-8)^2+(1-1)^2)} \\
 &= e^{(-1.5)} \\
 &= e^{-5} \\
 &= 0,006
 \end{aligned}$$

$$\begin{aligned}
 K(m_{45}, m_{136}) &= e^{(-1(5-3)^2+(5-1)^2+(4-2)^2+(8-8)^2+(1-3)^2)} \\
 &= e^{(-1.28)} \\
 &= e^{-28} \\
 &= 6,914
 \end{aligned}$$

$$\begin{aligned}
 K(m_{45}, m_{354}) &= e^{(-1(5-4)^2+(5-4)^2+(4-3)^2+(8-8)^2+(1-2)^2)} \\
 &= e^{(-1.4)} \\
 &= e^{-4} \\
 &= 0,018
 \end{aligned}$$

$$\begin{aligned}
 K(m_{45}, m_{25}) &= e^{(-1(5-5)^2+(5-4)^2+(4-3)^2+(8-8)^2+(1-1)^2)} \\
 &= e^{(-1.2)} \\
 &= e^{-2} \\
 &= 0,135
 \end{aligned}$$

$$\begin{aligned}
 K(m_{45}, m_{42}) &= e^{(-1(5-4)^2+(5-4)^2+(4-4)^2+(8-8)^2+(1-2)^2)} \\
 &= e^{(-1.3)} \\
 &= e^{-3} \\
 &= 0,049
 \end{aligned}$$

$$\begin{aligned}
 K(m_{45}, m_{127}) &= e^{(-1(5-4)^2+(5-4)^2+(4-4)^2+(8-8)^2+(1-1)^2)} \\
 &= e^{(-1.2)} \\
 &= e^{-2} \\
 &= 0,135
 \end{aligned}$$

$$\begin{aligned}
 K(m_{45}, m_{141}) &= e^{(-1(5-5)^2+(5-4)^2+(4-5)^2+(8-8)^2+(1-1)^2)} \\
 &= e^{(-1.2)} \\
 &= e^{-2} \\
 &= 0,135
 \end{aligned}$$

$$\begin{aligned}
 K(m_{45}, m_{318}) &= e^{(-1(5-5)^2+(5-5)^2+(4-5)^2+(8-6)^2+(1-1)^2)} \\
 &= e^{(-1.5)} \\
 &= e^{-5} \\
 &= 0,006
 \end{aligned}$$

$$\begin{aligned}
 K(m_{45}, m_{504}) &= e^{(-1(5-5)^2+(5-5)^2+(4-4)^2+(8-6)^2+(1-1)^2)} \\
 &= e^{(-1.4)} \\
 &= e^{-4} \\
 &= 0,018
 \end{aligned}$$

$$\begin{aligned}
 K(m_{45}, m_{45}) &= e^{(-1(5-5)^2+(5-5)^2+(4-4)^2+(8-8)^2+(1-1)^2)} \\
 &= e^{(-1.0)} \\
 &= e^0 \\
 &= 1
 \end{aligned}$$

$$\begin{aligned}
 K(m_{45}, m_{269}) &= e^{(-1(5-4)^2+(5-2)^2+(4-5)^2+(8-8)^2+(1-1)^2)} \\
 &= e^{(-1.11)} \\
 &= e^{-11} \\
 &= 0,000
 \end{aligned}$$



$$\begin{aligned}
K(m_{269}, m_2) &= e^{(-1(4-1)^2+(2-4)^2+(5-2)^2+(8-4)^2+(1-1)^2)} \\
&= e^{(-1.38)} \\
&= e^{-38} \\
&= 3,139
\end{aligned}$$

$$\begin{aligned}
K(m_{269}, m_{67}) &= e^{(-1(4-4)^2+(2-2)^2+(5-8)^2+(8-3)^2+(1-1)^2)} \\
&= e^{(-1.34)} \\
&= e^{-34} \\
&= 1,713
\end{aligned}$$

$$\begin{aligned}
K(m_{269}, m_8) &= e^{(-1(4-3)^2+(2-3)^2+(5-4)^2+(8-3)^2+(1-2)^2)} \\
&= e^{(-1.29)} \\
&= e^{-29} \\
&= 2,543
\end{aligned}$$

$$\begin{aligned}
K(m_{269}, m_{105}) &= e^{(-1(4-5)^2+(2-4)^2+(5-2)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.14)} \\
&= e^{-14} \\
&= 8,315
\end{aligned}$$

$$\begin{aligned}
K(m_{269}, m_{136}) &= e^{(-1(4-3)^2+(2-1)^2+(5-2)^2+(8-8)^2+(1-3)^2)} \\
&= e^{(-1.15)} \\
&= e^{-15} \\
&= 3,059
\end{aligned}$$

$$\begin{aligned}
K(m_{269}, m_{354}) &= e^{(-1(4-4)^2+(2-4)^2+(5-3)^2+(8-8)^2+(1-2)^2)} \\
&= e^{(-1.9)} \\
&= e^{-9} \\
&= 0,000
\end{aligned}$$

$$\begin{aligned}
K(m_{269}, m_{25}) &= e^{(-1(4-5)^2+(2-4)^2+(5-3)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.9)} \\
&= e^{-9} \\
&= 0,000
\end{aligned}$$

$$\begin{aligned}
K(m_{269}, m_{42}) &= e^{(-1(4-4)^2+(2-4)^2+(5-4)^2+(8-8)^2+(1-2)^2)} \\
&= e^{(-1.6)} \\
&= e^{-6} \\
&= 0,002
\end{aligned}$$

$$\begin{aligned}
K(m_{269}, m_{127}) &= e^{(-1(4-4)^2+(2-4)^2+(5-4)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.5)} \\
&= e^{-5} \\
&= 0,006
\end{aligned}$$

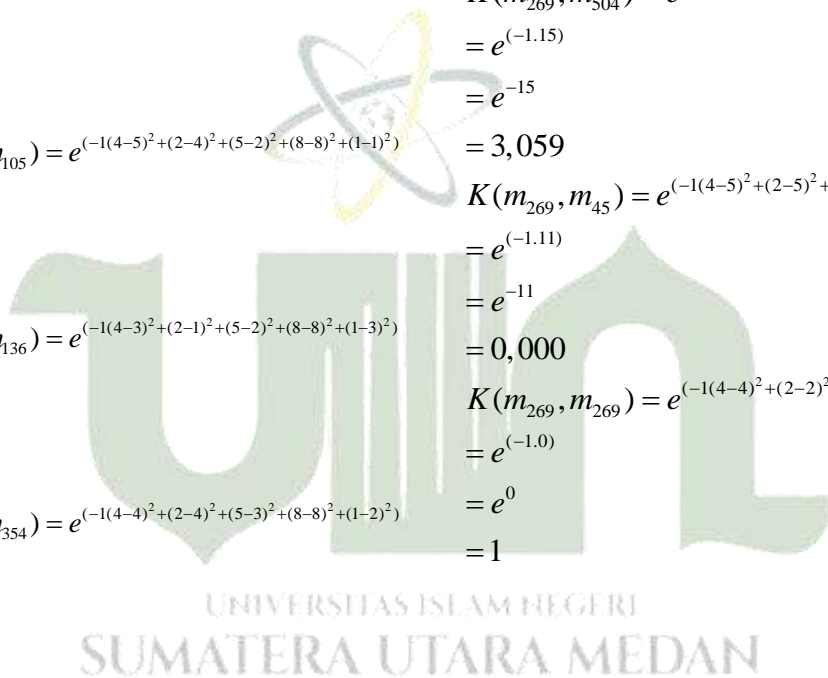
$$\begin{aligned}
K(m_{269}, m_{141}) &= e^{(-1(4-5)^2+(2-4)^2+(5-5)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.3)} \\
&= e^{-3} \\
&= 0,049
\end{aligned}$$

$$\begin{aligned}
K(m_{269}, m_{318}) &= e^{(-1(4-5)^2+(2-5)^2+(5-5)^2+(8-6)^2+(1-1)^2)} \\
&= e^{(-1.14)} \\
&= e^{-14} \\
&= 8,315
\end{aligned}$$

$$\begin{aligned}
K(m_{269}, m_{504}) &= e^{(-1(4-5)^2+(2-5)^2+(5-4)^2+(8-6)^2+(1-1)^2)} \\
&= e^{(-1.15)} \\
&= e^{-15} \\
&= 3,059
\end{aligned}$$

$$\begin{aligned}
K(m_{269}, m_{45}) &= e^{(-1(4-5)^2+(2-5)^2+(5-4)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.11)} \\
&= e^{-11} \\
&= 0,000
\end{aligned}$$

$$\begin{aligned}
K(m_{269}, m_{269}) &= e^{(-1(4-4)^2+(2-2)^2+(5-5)^2+(8-8)^2+(1-1)^2)} \\
&= e^{(-1.0)} \\
&= e^0 \\
&= 1
\end{aligned}$$



### Lampiran 3 : Perhitungan Kernel

#### Linear Data Training

Rumus :  $K(x, y) = x.y$

$$\begin{aligned}K_{(2,2)} &= (1.1) + (4.4) + (2.2) + (4.4) + (1.1) \\ &= 38 \\ K_{(2,67)} &= (1.4) + (4.2) + (2.8) + (4.3) + (1.1) \\ &= 41 \\ K_{(2,8)} &= (1.3) + (4.3) + (2.4) + (4.3) + (1.2) \\ &= 37 \\ K_{(2,105)} &= (1.5) + (4.4) + (2.2) + (4.8) + (1.1) \\ &= 58 \\ K_{(2,136)} &= (1.3) + (4.1) + (2.2) + (4.8) + (1.3) \\ &= 46 \\ K_{(2,354)} &= (1.4) + (4.4) + (2.3) + (4.8) + (1.2) \\ &= 60 \\ K_{(2,25)} &= (1.5) + (4.4) + (2.3) + (4.8) + (1.1) \\ &= 60 \\ K_{(2,42)} &= (1.4) + (4.4) + (2.4) + (4.8) + (1.2) \\ &= 62 \\ K_{(2,127)} &= (1.4) + (4.4) + (2.4) + (4.8) + (1.1) \\ &= 61 \\ K_{(2,141)} &= (1.5) + (4.4) + (2.5) + (4.8) + (1.1) \\ &= 64 \\ K_{(2,318)} &= (1.5) + (4.5) + (2.5) + (4.6) + (1.1) \\ &= 60 \\ K_{(2,504)} &= (1.5) + (4.5) + (2.4) + (4.6) + (1.1) \\ &= 58 \\ K_{(2,45)} &= (1.5) + (4.5) + (2.4) + (4.8) + (1.1) \\ &= 66 \\ K_{(2,269)} &= (1.4) + (4.2) + (2.5) + (4.8) + (1.1) \\ &= 55 \\ K_{(67,2)} &= (4.1) + (2.4) + (8.2) + (3.4) + (1.1) \\ &= 41 \\ K_{(67,67)} &= (4.4) + (2.2) + (8.8) + (3.3) + (1.1) \\ &= 94 \\ K_{(67,8)} &= (4.3) + (2.3) + (8.4) + (3.3) + (1.2) \\ &= 61 \\ K_{(67,105)} &= (4.5) + (2.4) + (8.2) + (3.8) + (1.1) \\ &= 69\end{aligned}$$

$$\begin{aligned}K_{(67,136)} &= (4.3) + (2.1) + (8.2) + (3.8) + (1.3) \\ &= 57 \\ K_{(67,354)} &= (4.4) + (2.4) + (8.3) + (3.8) + (1.2) \\ &= 74 \\ K_{(67,25)} &= (4.5) + (2.4) + (8.3) + (3.8) + (1.1) \\ &= 77 \\ K_{(67,42)} &= (4.4) + (2.4) + (8.4) + (3.8) + (1.2) \\ &= 82 \\ K_{(67,127)} &= (4.4) + (2.4) + (8.4) + (3.8) + (1.1) \\ &= 81 \\ K_{(67,141)} &= (4.5) + (2.4) + (8.5) + (3.8) + (1.1) \\ &= 93 \\ K_{(67,318)} &= (4.5) + (2.5) + (8.5) + (3.6) + (1.1) \\ &= 89 \\ K_{(67,504)} &= (4.5) + (2.5) + (8.4) + (3.6) + (1.1) \\ &= 81 \\ K_{(67,45)} &= (4.5) + (2.5) + (8.4) + (3.8) + (1.1) \\ &= 87 \\ K_{(67,269)} &= (4.4) + (2.2) + (8.5) + (3.8) + (1.1) \\ &= 85 \\ K_{(8,2)} &= (3.1) + (3.4) + (4.2) + (3.4) + (2.1) \\ &= 37 \\ K_{(8,67)} &= (3.4) + (3.2) + (4.8) + (3.3) + (2.1) \\ &= 61 \\ K_{(8,8)} &= (3.3) + (3.3) + (4.4) + (3.3) + (2.2) \\ &= 47 \\ K_{(8,105)} &= (3.5) + (3.4) + (4.2) + (3.8) + (2.1) \\ &= 61 \\ K_{(8,136)} &= (3.3) + (3.1) + (4.2) + (3.8) + (2.3) \\ &= 50 \\ K_{(8,354)} &= (3.4) + (3.4) + (4.3) + (3.8) + (2.2) \\ &= 64 \\ K_{(8,25)} &= (3.5) + (3.4) + (4.3) + (3.8) + (2.1) \\ &= 65 \\ K_{(8,42)} &= (3.4) + (3.4) + (4.4) + (3.8) + (2.2) \\ &= 68 \\ K_{(8,127)} &= (3.4) + (3.4) + (4.4) + (3.8) + (2.1) \\ &= 66 \\ K_{(8,141)} &= (3.5) + (3.4) + (4.5) + (3.8) + (2.1) \\ &= 73\end{aligned}$$

$$\begin{aligned}
K_{(8,318)} &= (3.5) + (3.5) + (4.5) + (3.6) + (2.1) \\
&= 70 \\
K_{(8,504)} &= (3.5) + (3.5) + (4.4) + (3.6) + (2.1) \\
&= 66 \\
K_{(8,45)} &= (3.5) + (3.5) + (4.4) + (3.8) + (2.1) \\
&= 72 \\
K_{(8,269)} &= (3.4) + (3.2) + (4.5) + (3.8) + (2.1) \\
&= 64 \\
K_{(105,2)} &= (5.1) + (4.4) + (2.2) + (8.4) + (1.1) \\
&= 58 \\
K_{(105,67)} &= (5.4) + (4.2) + (2.8) + (8.3) + (1.1) \\
&= 69 \\
K_{(105,8)} &= (5.3) + (4.3) + (2.4) + (8.3) + (1.2) \\
&= 61 \\
K_{(105,105)} &= (5.5) + (4.4) + (2.2) + (8.8) + (1.1) \\
&= 110 \\
K_{(105,136)} &= (5.3) + (4.1) + (2.2) + (8.8) + (1.3) \\
&= 90 \\
K_{(105,354)} &= (5.4) + (4.4) + (2.3) + (8.8) + (1.2) \\
&= 107 \\
K_{(105,25)} &= (5.5) + (4.4) + (2.3) + (8.8) + (1.1) \\
&= 112 \\
K_{(105,42)} &= (5.4) + (4.4) + (2.4) + (8.8) + (1.2) \\
&= 110 \\
K_{(105,127)} &= (5.4) + (4.4) + (2.4) + (8.8) + (1.1) \\
&= 109 \\
K_{(105,141)} &= (5.5) + (4.4) + (2.5) + (8.8) + (1.1) \\
&= 116 \\
K_{(105,318)} &= (5.5) + (4.5) + (2.5) + (8.6) + (1.1) \\
&= 104 \\
K_{(105,504)} &= (5.5) + (4.5) + (2.4) + (8.6) + (1.1) \\
&= 102 \\
K_{(105,45)} &= (5.5) + (4.5) + (2.4) + (8.8) + (1.1) \\
&= 118 \\
K_{(105,269)} &= (5.4) + (4.2) + (2.5) + (8.8) + (1.1) \\
&= 103 \\
K_{(136,2)} &= (3.1) + (1.4) + (2.2) + (8.4) + (3.1) \\
&= 46 \\
K_{(136,67)} &= (3.4) + (1.2) + (2.8) + (8.3) + (3.1) \\
&= 57 \\
K_{(136,8)} &= (3.3) + (1.3) + (2.4) + (8.3) + (3.2) \\
&= 51
\end{aligned}$$

$$\begin{aligned}
K_{(136,105)} &= (3.5) + (1.4) + (2.2) + (8.8) + (3.1) \\
&= 90 \\
K_{(136,136)} &= (3.3) + (1.1) + (2.2) + (8.8) + (3.3) \\
&= 87 \\
K_{(136,354)} &= (3.4) + (1.4) + (2.3) + (8.8) + (3.2) \\
&= 92 \\
K_{(136,25)} &= (3.5) + (1.4) + (2.3) + (8.8) + (3.1) \\
&= 92 \\
K_{(136,42)} &= (3.4) + (1.4) + (2.4) + (8.8) + (3.2) \\
&= 94 \\
K_{(136,127)} &= (3.4) + (1.4) + (2.4) + (8.8) + (3.1) \\
&= 91 \\
K_{(136,141)} &= (3.5) + (1.4) + (2.5) + (8.8) + (3.1) \\
&= 96 \\
K_{(136,318)} &= (3.5) + (1.5) + (2.5) + (8.6) + (3.1) \\
&= 81 \\
K_{(136,504)} &= (3.5) + (1.5) + (2.4) + (8.6) + (3.1) \\
&= 79 \\
K_{(136,45)} &= (3.5) + (1.5) + (2.4) + (8.8) + (3.1) \\
&= 95 \\
K_{(136,269)} &= (3.4) + (1.2) + (2.5) + (8.8) + (3.1) \\
&= 91 \\
K_{(354,2)} &= (4.1) + (4.4) + (3.2) + (8.4) + (2.1) \\
&= 60 \\
K_{(354,67)} &= (4.4) + (4.2) + (3.8) + (8.3) + (2.1) \\
&= 74 \\
K_{(354,8)} &= (4.3) + (4.3) + (3.4) + (8.3) + (2.2) \\
&= 64 \\
K_{(354,105)} &= (4.5) + (4.4) + (3.2) + (8.8) + (2.1) \\
&= 108 \\
K_{(354,136)} &= (4.3) + (4.1) + (3.2) + (8.8) + (2.3) \\
&= 92 \\
K_{(354,354)} &= (4.4) + (4.4) + (3.3) + (8.8) + (2.2) \\
&= 109 \\
K_{(354,25)} &= (4.5) + (4.4) + (3.3) + (8.8) + (2.1) \\
&= 111 \\
K_{(354,42)} &= (4.4) + (4.4) + (3.4) + (8.8) + (2.2) \\
&= 112 \\
K_{(354,127)} &= (4.4) + (4.4) + (3.4) + (8.8) + (2.1) \\
&= 110 \\
K_{(354,141)} &= (4.5) + (4.4) + (3.5) + (8.8) + (2.1) \\
&= 117
\end{aligned}$$

$$\begin{aligned}
K_{(354,318)} &= (4.5) + (4.5) + (3.5) + (8.6) + (2.1) \\
&= 105 \\
K_{(354,504)} &= (4.5) + (4.5) + (3.4) + (8.6) + (2.1) \\
&= 102 \\
K_{(354,45)} &= (4.5) + (4.5) + (3.4) + (8.8) + (2.1) \\
&= 118 \\
K_{(354,269)} &= (4.4) + (4.2) + (3.5) + (8.8) + (2.1) \\
&= 105 \\
K_{(25,2)} &= (5.1) + (4.4) + (3.2) + (8.4) + (1.1) \\
&= 60 \\
K_{(25,67)} &= (5.4) + (4.2) + (3.8) + (8.3) + (1.1) \\
&= 77 \\
K_{(25,8)} &= (5.3) + (4.3) + (3.4) + (8.3) + (1.2) \\
&= 65 \\
K_{(25,105)} &= (5.5) + (4.4) + (3.2) + (8.8) + (1.1) \\
&= 112 \\
K_{(25,136)} &= (5.3) + (4.1) + (3.2) + (8.8) + (1.3) \\
&= 92 \\
K_{(25,354)} &= (5.4) + (4.4) + (3.3) + (8.8) + (1.2) \\
&= 111 \\
K_{(25,25)} &= (5.5) + (4.4) + (3.3) + (8.8) + (1.1) \\
&= 115 \\
K_{(25,42)} &= (5.4) + (4.4) + (3.4) + (8.8) + (1.2) \\
&= 114 \\
K_{(25,127)} &= (5.4) + (4.4) + (3.4) + (8.8) + (1.1) \\
&= 113 \\
K_{(25,141)} &= (5.5) + (4.4) + (3.5) + (8.8) + (1.1) \\
&= 125 \\
K_{(25,318)} &= (5.5) + (4.5) + (3.5) + (8.6) + (1.1) \\
&= 109 \\
K_{(25,504)} &= (5.5) + (4.5) + (3.4) + (8.6) + (1.1) \\
&= 106 \\
K_{(25,45)} &= (5.5) + (4.5) + (3.4) + (8.8) + (1.1) \\
&= 122 \\
K_{(25,269)} &= (5.4) + (4.2) + (3.5) + (8.8) + (1.1) \\
&= 108 \\
K_{(42,2)} &= (4.1) + (4.4) + (4.2) + (8.4) + (2.1) \\
&= 62 \\
K_{(42,67)} &= (4.4) + (4.2) + (4.8) + (8.3) + (2.1) \\
&= 82
\end{aligned}$$

$$\begin{aligned}
K_{(42,8)} &= (4.3) + (4.3) + (4.4) + (8.3) + (2.2) \\
&= 68 \\
K_{(42,105)} &= (4.5) + (4.4) + (4.2) + (8.8) + (2.1) \\
&= 110 \\
K_{(42,136)} &= (4.3) + (4.1) + (4.2) + (8.8) + (2.3) \\
&= 94 \\
K_{(42,354)} &= (4.4) + (4.4) + (4.3) + (8.8) + (2.2) \\
&= 112 \\
K_{(42,25)} &= (4.5) + (4.4) + (4.3) + (8.8) + (2.1) \\
&= 114 \\
K_{(42,42)} &= (4.4) + (4.4) + (4.4) + (8.8) + (2.2) \\
&= 116 \\
K_{(42,127)} &= (4.4) + (4.4) + (4.4) + (8.8) + (2.1) \\
&= 114 \\
K_{(42,141)} &= (4.5) + (4.4) + (4.5) + (8.8) + (2.1) \\
&= 122 \\
K_{(42,318)} &= (4.5) + (4.5) + (4.5) + (8.6) + (2.1) \\
&= 110 \\
K_{(42,504)} &= (4.5) + (4.5) + (4.4) + (8.6) + (2.1) \\
&= 106 \\
K_{(42,45)} &= (4.5) + (4.5) + (4.4) + (8.8) + (2.1) \\
&= 122 \\
K_{(42,269)} &= (4.4) + (4.2) + (4.5) + (8.8) + (2.1) \\
&= 110 \\
K_{(127,2)} &= (4.1) + (4.4) + (4.2) + (8.4) + (1.1) \\
&= 61 \\
K_{(127,67)} &= (4.4) + (4.2) + (4.8) + (8.3) + (1.1) \\
&= 81 \\
K_{(127,8)} &= (4.3) + (4.3) + (4.4) + (8.3) + (1.2) \\
&= 66 \\
K_{(127,105)} &= (4.5) + (4.4) + (4.2) + (8.8) + (1.1) \\
&= 109 \\
K_{(127,136)} &= (4.3) + (4.1) + (4.2) + (8.8) + (1.3) \\
&= 91 \\
K_{(127,354)} &= (4.4) + (4.4) + (4.3) + (8.8) + (1.2) \\
&= 110 \\
K_{(127,25)} &= (4.5) + (4.4) + (4.3) + (8.8) + (1.1) \\
&= 113
\end{aligned}$$

$$\begin{aligned}
K_{(127,42)} &= (4.4) + (4.4) + (4.4) + (8.8) + (1.2) \\
&= 114 \\
K_{(127,127)} &= (4.4) + (4.4) + (4.4) + (8.8) + (1.1) \\
&= 113 \\
K_{(127,141)} &= (4.5) + (4.4) + (4.5) + (8.8) + (1.1) \\
&= 121 \\
K_{(127,318)} &= (4.5) + (4.5) + (4.5) + (8.6) + (1.1) \\
&= 109 \\
K_{(127,504)} &= (4.5) + (4.5) + (4.4) + (8.6) + (1.1) \\
&= 105 \\
K_{(127,45)} &= (4.5) + (4.5) + (4.4) + (8.8) + (1.1) \\
&= 121 \\
K_{(127,269)} &= (4.4) + (4.2) + (4.5) + (8.8) + (1.1) \\
&= 109 \\
K_{(141,2)} &= (5.1) + (4.4) + (5.2) + (8.4) + (1.1) \\
&= 64 \\
K_{(141,67)} &= (5.4) + (4.2) + (5.8) + (8.3) + (1.1) \\
&= 93 \\
K_{(141,8)} &= (5.3) + (4.3) + (5.4) + (8.3) + (1.2) \\
&= 73 \\
K_{(141,105)} &= (5.5) + (4.4) + (5.2) + (8.8) + (1.1) \\
&= 116 \\
K_{(141,136)} &= (5.3) + (4.1) + (5.2) + (8.8) + (1.3) \\
&= 96 \\
K_{(141,354)} &= (5.4) + (4.4) + (5.3) + (8.8) + (1.2) \\
&= 117 \\
K_{(141,25)} &= (5.5) + (4.4) + (5.3) + (8.8) + (1.1) \\
&= 121 \\
K_{(141,42)} &= (5.4) + (4.4) + (5.4) + (8.8) + (1.2) \\
&= 122 \\
K_{(141,127)} &= (5.4) + (4.4) + (5.4) + (8.8) + (1.1) \\
&= 121 \\
K_{(141,141)} &= (5.5) + (4.4) + (5.5) + (8.8) + (1.1) \\
&= 131 \\
K_{(141,318)} &= (5.5) + (4.5) + (5.5) + (8.6) + (1.1) \\
&= 119 \\
K_{(141,504)} &= (5.5) + (4.5) + (5.4) + (8.6) + (1.1) \\
&= 114 \\
K_{(141,45)} &= (5.5) + (4.5) + (5.4) + (8.8) + (1.1) \\
&= 130
\end{aligned}$$

$$\begin{aligned}
K_{(141,269)} &= (5.4) + (4.2) + (5.5) + (8.8) + (1.1) \\
&= 118 \\
K_{(318,2)} &= (5.1) + (5.4) + (5.2) + (6.4) + (1.1) \\
&= 60 \\
K_{(318,67)} &= (5.4) + (5.2) + (5.8) + (6.3) + (1.1) \\
&= 89 \\
K_{(318,8)} &= (5.3) + (5.3) + (5.4) + (6.3) + (1.2) \\
&= 70 \\
K_{(318,105)} &= (5.5) + (5.4) + (5.2) + (6.8) + (1.1) \\
&= 104 \\
K_{(318,136)} &= (5.3) + (5.1) + (5.2) + (6.8) + (1.3) \\
&= 81 \\
K_{(318,354)} &= (5.4) + (5.4) + (5.3) + (6.8) + (1.2) \\
&= 105 \\
K_{(318,25)} &= (5.5) + (5.4) + (5.3) + (6.8) + (1.1) \\
&= 109 \\
K_{(318,42)} &= (5.4) + (5.4) + (5.4) + (6.8) + (1.2) \\
&= 110 \\
K_{(318,127)} &= (5.4) + (5.4) + (5.4) + (6.8) + (1.1) \\
&= 109 \\
K_{(318,141)} &= (5.5) + (5.4) + (5.5) + (6.8) + (1.1) \\
&= 119 \\
K_{(318,318)} &= (5.5) + (5.5) + (5.5) + (6.6) + (1.1) \\
&= 112 \\
K_{(318,504)} &= (5.5) + (5.5) + (5.4) + (6.6) + (1.1) \\
&= 107 \\
K_{(318,45)} &= (5.5) + (5.5) + (5.4) + (6.8) + (1.1) \\
&= 119 \\
K_{(318,269)} &= (5.4) + (5.2) + (5.5) + (6.8) + (1.1) \\
&= 104 \\
K_{(504,2)} &= (5.1) + (5.4) + (4.2) + (6.4) + (1.1) \\
&= 58 \\
K_{(504,67)} &= (5.4) + (5.2) + (4.8) + (6.3) + (1.1) \\
&= 81 \\
K_{(504,8)} &= (5.3) + (5.3) + (4.4) + (6.3) + (1.2) \\
&= 66 \\
K_{(504,105)} &= (5.5) + (5.4) + (4.2) + (6.8) + (1.1) \\
&= 102 \\
K_{(504,136)} &= (5.3) + (5.1) + (4.2) + (6.8) + (1.3) \\
&= 79
\end{aligned}$$

$$\begin{aligned}
K_{(504,354)} &= (5.4) + (5.4) + (4.3) + (6.8) + (1.2) \\
&= 102 \\
K_{(504,25)} &= (5.5) + (5.4) + (4.3) + (6.8) + (1.1) \\
&= 106 \\
K_{(504,42)} &= (5.4) + (5.4) + (4.4) + (6.8) + (1.2) \\
&= 106 \\
K_{(504,127)} &= (5.4) + (5.4) + (4.4) + (6.8) + (1.1) \\
&= 105 \\
K_{(504,141)} &= (5.5) + (5.4) + (4.5) + (6.8) + (1.1) \\
&= 114 \\
K_{(504,318)} &= (5.5) + (5.5) + (4.5) + (6.6) + (1.1) \\
&= 107 \\
K_{(504,504)} &= (5.5) + (5.5) + (4.4) + (6.6) + (1.1) \\
&= 103 \\
K_{(504,45)} &= (5.5) + (5.5) + (4.4) + (6.8) + (1.1) \\
&= 115 \\
K_{(504,269)} &= (5.4) + (5.2) + (4.5) + (6.8) + (1.1) \\
&= 99 \\
K_{(45,2)} &= (5.1) + (5.4) + (4.2) + (8.4) + (1.1) \\
&= 66 \\
K_{(45,67)} &= (5.4) + (5.2) + (4.8) + (8.3) + (1.1) \\
&= 87 \\
K_{(45,8)} &= (5.3) + (5.3) + (4.4) + (8.3) + (1.1) \\
&= 71 \\
K_{(45,105)} &= (5.5) + (5.4) + (4.2) + (8.8) + (1.1) \\
&= 118 \\
K_{(45,136)} &= (5.3) + (5.1) + (4.2) + (8.8) + (1.3) \\
&= 95 \\
K_{(45,354)} &= (5.4) + (5.4) + (4.3) + (8.8) + (1.2) \\
&= 118 \\
K_{(45,25)} &= (5.5) + (5.4) + (4.3) + (8.8) + (1.1) \\
&= 122 \\
K_{(45,42)} &= (5.4) + (5.4) + (4.4) + (8.8) + (1.2) \\
&= 122 \\
K_{(45,127)} &= (5.4) + (5.4) + (4.4) + (8.8) + (1.1) \\
&= 121 \\
K_{(45,141)} &= (5.5) + (5.4) + (4.5) + (8.8) + (1.1) \\
&= 130 \\
K_{(45,318)} &= (5.5) + (5.5) + (4.5) + (8.6) + (1.1) \\
&= 119
\end{aligned}$$

$$\begin{aligned}
K_{(45,504)} &= (5.5) + (5.5) + (4.4) + (8.6) + (1.1) \\
&= 115 \\
K_{(45,45)} &= (5.5) + (5.5) + (4.4) + (8.8) + (1.1) \\
&= 131 \\
K_{(45,269)} &= (5.4) + (5.2) + (4.5) + (8.8) + (1.1) \\
&= 115 \\
K_{(269,2)} &= (4.1) + (2.4) + (5.2) + (8.4) + (1.1) \\
&= 55 \\
K_{(269,67)} &= (4.4) + (2.2) + (5.8) + (8.3) + (1.1) \\
&= 85 \\
K_{(269,8)} &= (4.3) + (2.3) + (5.4) + (8.3) + (1.2) \\
&= 64 \\
K_{(269,105)} &= (4.5) + (2.4) + (5.2) + (8.8) + (1.1) \\
&= 103 \\
K_{(269,136)} &= (4.3) + (2.1) + (5.2) + (8.8) + (1.3) \\
&= 91 \\
K_{(269,354)} &= (4.4) + (2.4) + (5.3) + (8.8) + (1.2) \\
&= 105 \\
K_{(269,25)} &= (4.5) + (2.4) + (5.3) + (8.8) + (1.1) \\
&= 108 \\
K_{(269,42)} &= (4.4) + (2.4) + (5.4) + (8.8) + (1.2) \\
&= 110 \\
K_{(269,127)} &= (4.4) + (2.4) + (5.4) + (8.8) + (1.1) \\
&= 109 \\
K_{(269,141)} &= (4.5) + (2.4) + (5.5) + (8.8) + (1.1) \\
&= 118 \\
K_{(269,318)} &= (4.5) + (2.5) + (5.5) + (8.6) + (1.1) \\
&= 104 \\
K_{(269,504)} &= (4.5) + (2.5) + (5.4) + (8.6) + (1.1) \\
&= 99 \\
K_{(269,45)} &= (4.5) + (2.5) + (5.4) + (8.8) + (1.1) \\
&= 115 \\
K_{(269,269)} &= (4.4) + (2.2) + (5.5) + (8.8) + (1.1) \\
&= 110
\end{aligned}$$

#### Lampiran 4 : Perhitungan Kernel

##### *Polynomial Data Training*

Rumus :  $K(x, y) = (x.y + 1)^p$

$$\begin{aligned} K_{(2,2)} &= ((1.1) + (4.4) + (2.2) + (4.4) + (1.1) + 1)^2 \\ &= (38 + 1)^2 \\ &= 1,521 \end{aligned}$$

$$\begin{aligned} K_{(2,67)} &= ((1.4) + (4.2) + (2.8) + (4.3) + (1.1) + 1)^2 \\ &= (41 + 1)^2 \\ &= 1,764 \end{aligned}$$

$$\begin{aligned} K_{(2,8)} &= ((1.3) + (4.3) + (2.4) + (4.3) + (1.2) + 1)^2 \\ &= (37 + 1)^2 \\ &= 1,444 \end{aligned}$$

$$\begin{aligned} K_{(2,105)} &= ((1.5) + (4.4) + (2.2) + (4.8) + (1.1) + 1)^2 \\ &= (58 + 1)^2 \\ &= 3,481 \end{aligned}$$

$$\begin{aligned} K_{(2,136)} &= ((1.3) + (4.1) + (2.2) + (4.8) + (1.3) + 1)^2 \\ &= (46 + 1)^2 \\ &= 2,209 \end{aligned}$$

$$\begin{aligned} K_{(2,354)} &= ((1.4) + (4.4) + (2.3) + (4.8) + (1.2) + 1)^2 \\ &= (60 + 1)^2 \\ &= 3,721 \end{aligned}$$

$$\begin{aligned} K_{(2,25)} &= ((1.5) + (4.4) + (2.3) + (4.8) + (1.1) + 1)^2 \\ &= (60 + 1)^2 \\ &= 3,721 \end{aligned}$$

$$\begin{aligned} K_{(2,42)} &= ((1.4) + (4.4) + (2.4) + (4.8) + (1.2) + 1)^2 \\ &= (62 + 1)^2 \\ &= 3,969 \end{aligned}$$

$$\begin{aligned} K_{(2,127)} &= ((1.4) + (4.4) + (2.4) + (4.8) + (1.1) + 1)^2 \\ &= (61 + 1)^2 \\ &= 3,844 \end{aligned}$$

$$\begin{aligned} K_{(2,141)} &= ((1.5) + (4.4) + (2.5) + (4.8) + (1.1) + 1)^2 \\ &= (64 + 1)^2 \\ &= 4,225 \end{aligned}$$

$$\begin{aligned} K_{(2,318)} &= ((1.5) + (4.5) + (2.5) + (4.6) + (1.1) + 1)^2 \\ &= (60 + 1)^2 \\ &= 3,721 \end{aligned}$$

$$\begin{aligned} K_{(2,504)} &= ((1.5) + (4.5) + (2.4) + (4.6) + (1.1) + 1)^2 \\ &= (58 + 1)^2 \\ &= 3,481 \end{aligned}$$

$$\begin{aligned} K_{(2,45)} &= ((1.5) + (4.5) + (2.4) + (4.8) + (1.1) + 1)^2 \\ &= (66 + 1)^2 \\ &= 4,489 \end{aligned}$$

$$\begin{aligned} K_{(2,269)} &= ((1.4) + (4.2) + (2.5) + (4.8) + (1.1) + 1)^2 \\ &= (55 + 1)^2 \\ &= 3,136 \end{aligned}$$

$$\begin{aligned} K_{(67,2)} &= ((4.1) + (2.4) + (8.2) + (3.4) + (1.1) + 1)^2 \\ &= (41 + 1)^2 \\ &= 1,764 \end{aligned}$$

$$\begin{aligned} K_{(67,67)} &= ((4.4) + (2.2) + (8.8) + (3.3) + (1.1) + 1)^2 \\ &= (94 + 1)^2 \\ &= 9,025 \end{aligned}$$

$$\begin{aligned} K_{(67,8)} &= ((4.3) + (2.3) + (8.4) + (3.3) + (1.2) + 1)^2 \\ &= (61 + 1)^2 \\ &= 3,844 \end{aligned}$$

$$\begin{aligned} K_{(67,105)} &= ((4.5) + (2.4) + (8.2) + (3.8) + (1.1) + 1)^2 \\ &= (69 + 1)^2 \\ &= 4,900 \end{aligned}$$

$$\begin{aligned} K_{(67,136)} &= ((4.3) + (2.1) + (8.2) + (3.8) + (1.3) + 1)^2 \\ &= (57 + 1)^2 \\ &= 3,364 \end{aligned}$$

$$\begin{aligned} K_{(67,354)} &= ((4.4) + (2.4) + (8.3) + (3.8) + (1.2) + 1)^2 \\ &= (74 + 1)^2 \\ &= 5,625 \end{aligned}$$

$$\begin{aligned} K_{(67,25)} &= ((4.5) + (2.4) + (8.3) + (3.8) + (1.1) + 1)^2 \\ &= (77 + 1)^2 \\ &= 6,084 \end{aligned}$$

$$\begin{aligned} K_{(67,42)} &= ((4.4) + (2.4) + (8.4) + (3.8) + (1.2) + 1)^2 \\ &= (82 + 1)^2 \\ &= 6,889 \end{aligned}$$

$$\begin{aligned} K_{(67,127)} &= ((4.4) + (2.4) + (8.4) + (3.8) + (1.1) + 1)^2 \\ &= (81 + 1)^2 \\ &= 6,724 \end{aligned}$$

$$\begin{aligned} K_{(67,141)} &= ((4.5) + (2.4) + (8.5) + (3.8) + (1.1) + 1)^2 \\ &= (93+1)^2 \\ &= 8,836 \end{aligned}$$

$$\begin{aligned} K_{(67,318)} &= ((4.5) + (2.5) + (8.5) + (3.6) + (1.1) + 1)^2 \\ &= (89+1)^2 \\ &= 8,100 \end{aligned}$$

$$\begin{aligned} K_{(67,504)} &= ((4.5) + (2.5) + (8.4) + (3.6) + (1.1) + 1)^2 \\ &= (81+1)^2 \\ &= 6,724 \end{aligned}$$

$$\begin{aligned} K_{(67,45)} &= ((4.5) + (2.5) + (8.4) + (3.8) + (1.1) + 1)^2 \\ &= (87+1)^2 \\ &= 7,744 \end{aligned}$$

$$\begin{aligned} K_{(67,269)} &= ((4.4) + (2.2) + (8.5) + (3.8) + (1.1) + 1)^2 \\ &= (85+1)^2 \\ &= 7,396 \end{aligned}$$

$$\begin{aligned} K_{(8,2)} &= ((3.1) + (3.4) + (4.2) + (3.4) + (2.1) + 1)^2 \\ &= (37+1)^2 \\ &= 1,444 \end{aligned}$$

$$\begin{aligned} K_{(8,67)} &= ((3.4) + (3.2) + (4.8) + (3.3) + (2.1) + 1)^2 \\ &= (61+1)^2 \\ &= 3,844 \end{aligned}$$

$$\begin{aligned} K_{(8,8)} &= ((3.3) + (3.3) + (4.4) + (3.3) + (2.2) + 1)^2 \\ &= (47+1)^2 \\ &= 2,304 \end{aligned}$$

$$\begin{aligned} K_{(8,105)} &= ((3.5) + (3.4) + (4.2) + (3.8) + (2.1) + 1)^2 \\ &= (61+1)^2 \\ &= 3,844 \end{aligned}$$

$$\begin{aligned} K_{(8,136)} &= ((3.3) + (3.1) + (4.2) + (3.8) + (2.3) + 1)^2 \\ &= (50+1)^2 \\ &= 2,601 \end{aligned}$$

$$\begin{aligned} K_{(8,354)} &= ((3.4) + (3.4) + (4.3) + (3.8) + (2.2) + 1)^2 \\ &= (64+1)^2 \\ &= 4,225 \end{aligned}$$

$$\begin{aligned} K_{(8,25)} &= ((3.5) + (3.4) + (4.3) + (3.8) + (2.1) + 1)^2 \\ &= (65+1)^2 \\ &= 4,356 \end{aligned}$$

$$\begin{aligned} K_{(8,42)} &= ((3.4) + (3.4) + (4.4) + (3.8) + (2.2) + 1)^2 \\ &= (68+1)^2 \\ &= 4,761 \end{aligned}$$

$$\begin{aligned} K_{(8,127)} &= ((3.4) + (3.4) + (4.4) + (3.8) + (2.1) + 1)^2 \\ &= (66+1)^2 \\ &= 4,489 \end{aligned}$$

$$\begin{aligned} K_{(8,141)} &= ((3.5) + (3.4) + (4.5) + (3.8) + (2.1) + 1)^2 \\ &= (73+1)^2 \\ &= 5,476 \end{aligned}$$

$$\begin{aligned} K_{(8,318)} &= ((3.5) + (3.5) + (4.5) + (3.6) + (2.1) + 1)^2 \\ &= (70+1)^2 \\ &= 5,041 \end{aligned}$$

$$\begin{aligned} K_{(8,504)} &= ((3.5) + (3.5) + (4.4) + (3.6) + (2.1) + 1)^2 \\ &= (66+1)^2 \\ &= 4,489 \end{aligned}$$

$$\begin{aligned} K_{(8,45)} &= ((3.5) + (3.5) + (4.4) + (3.8) + (2.1) + 1)^2 \\ &= (72+1)^2 \\ &= 5,329 \end{aligned}$$

$$\begin{aligned} K_{(8,269)} &= ((3.4) + (3.2) + (4.5) + (3.8) + (2.1) + 1)^2 \\ &= (64+1)^2 \\ &= 4,225 \end{aligned}$$

$$\begin{aligned} K_{(105,2)} &= ((5.1) + (4.4) + (2.2) + (8.4) + (1.1) + 1)^2 \\ &= (58+1)^2 \\ &= 3,481 \end{aligned}$$

$$\begin{aligned} K_{(105,67)} &= ((5.4) + (4.2) + (2.8) + (8.3) + (1.1) + 1)^2 \\ &= (69+1)^2 \\ &= 4,900 \end{aligned}$$

$$\begin{aligned} K_{(105,8)} &= ((5.3) + (4.3) + (2.4) + (8.3) + (1.2) + 1)^2 \\ &= (61+1)^2 \\ &= 3,844 \end{aligned}$$

$$\begin{aligned} K_{(105,105)} &= ((5.5) + (4.4) + (2.2) + (8.8) + (1.1) + 1)^2 \\ &= (110+1)^2 \\ &= 12,321 \end{aligned}$$

$$\begin{aligned} K_{(105,136)} &= ((5.3) + (4.1) + (2.2) + (8.8) + (1.3) + 1)^2 \\ &= (90+1)^2 \\ &= 8,281 \end{aligned}$$



$$\begin{aligned}
 K_{(105,354)} &= ((5.4) + (4.4) + (2.3) + (8.8) + (1.2) + 1)^2 \\
 &= (107 + 1)^2 \\
 &= 11,664
 \end{aligned}$$

$$\begin{aligned}
 K_{(105,25)} &= ((5.5) + (4.4) + (2.3) + (8.8) + (1.1) + 1)^2 \\
 &= (112 + 1)^2 \\
 &= 12,769
 \end{aligned}$$

$$\begin{aligned}
 K_{(105,42)} &= ((5.4) + (4.4) + (2.4) + (8.8) + (1.2) + 1)^2 \\
 &= (110 + 1)^2 \\
 &= 12,321
 \end{aligned}$$

$$\begin{aligned}
 K_{(105,127)} &= ((5.4) + (4.4) + (2.4) + (8.8) + (1.1) + 1)^2 \\
 &= (109 + 1)^2 \\
 &= 12,100
 \end{aligned}$$

$$\begin{aligned}
 K_{(105,141)} &= ((5.5) + (4.4) + (2.5) + (8.8) + (1.1) + 1)^2 \\
 &= (116 + 1)^2 \\
 &= 13,689
 \end{aligned}$$

$$\begin{aligned}
 K_{(105,318)} &= ((5.5) + (4.5) + (2.5) + (8.6) + (1.1) + 1)^2 \\
 &= (104 + 1)^2 \\
 &= 11,025
 \end{aligned}$$

$$\begin{aligned}
 K_{(105,504)} &= ((5.5) + (4.5) + (2.4) + (8.6) + (1.1) + 1)^2 \\
 &= (102 + 1)^2 \\
 &= 10,609
 \end{aligned}$$

$$\begin{aligned}
 K_{(105,45)} &= ((5.5) + (4.5) + (2.4) + (8.8) + (1.1) + 1)^2 \\
 &= (118 + 1)^2 \\
 &= 14,161
 \end{aligned}$$

$$\begin{aligned}
 K_{(105,269)} &= ((5.4) + (4.2) + (2.5) + (8.8) + (1.1) + 1)^2 \\
 &= (103 + 1)^2 \\
 &= 10,816
 \end{aligned}$$

$$\begin{aligned}
 K_{(136,2)} &= ((3.1) + (1.4) + (2.2) + (8.4) + (3.1) + 1)^2 \\
 &= (46 + 1)^2 \\
 &= 2,209
 \end{aligned}$$

$$\begin{aligned}
 K_{(136,67)} &= ((3.4) + (1.2) + (2.8) + (8.3) + (3.1) + 1)^2 \\
 &= (57 + 1)^2 \\
 &= 3,364
 \end{aligned}$$

$$\begin{aligned}
 K_{(136,8)} &= ((3.3) + (1.3) + (2.4) + (8.3) + (3.2) + 1)^2 \\
 &= (51 + 1)^2 \\
 &= 2,704
 \end{aligned}$$

$$\begin{aligned}
 K_{(136,105)} &= ((3.5) + (1.4) + (2.2) + (8.8) + (3.1) + 1)^2 \\
 &= (90 + 1)^2 \\
 &= 8,281
 \end{aligned}$$

$$\begin{aligned}
 K_{(136,136)} &= ((3.3) + (1.1) + (2.2) + (8.8) + (3.3) + 1)^2 \\
 &= (87 + 1)^2 \\
 &= 7,744
 \end{aligned}$$

$$\begin{aligned}
 K_{(136,354)} &= ((3.4) + (1.4) + (2.3) + (8.8) + (3.2) + 1)^2 \\
 &= (92 + 1)^2 \\
 &= 8,649
 \end{aligned}$$

$$\begin{aligned}
 K_{(136,25)} &= ((3.5) + (1.4) + (2.3) + (8.8) + (3.1) + 1)^2 \\
 &= (92 + 1)^2 \\
 &= 8,649
 \end{aligned}$$

$$\begin{aligned}
 K_{(136,42)} &= ((3.4) + (1.4) + (2.4) + (8.8) + (3.2) + 1)^2 \\
 &= (94 + 1)^2 \\
 &= 9,025
 \end{aligned}$$

$$\begin{aligned}
 K_{(136,127)} &= ((3.4) + (1.4) + (2.4) + (8.8) + (3.1) + 1)^2 \\
 &= (91 + 1)^2 \\
 &= 8,464
 \end{aligned}$$

$$\begin{aligned}
 K_{(136,141)} &= ((3.5) + (1.4) + (2.5) + (8.8) + (3.1) + 1)^2 \\
 &= (96 + 1)^2 \\
 &= 9,409
 \end{aligned}$$

$$\begin{aligned}
 K_{(136,318)} &= ((3.5) + (1.5) + (2.5) + (8.6) + (3.1) + 1)^2 \\
 &= (81 + 1)^2 \\
 &= 6,724
 \end{aligned}$$

$$\begin{aligned}
 K_{(136,504)} &= ((3.5) + (1.5) + (2.4) + (8.6) + (3.1) + 1)^2 \\
 &= (79 + 1)^2 \\
 &= 6,400
 \end{aligned}$$

$$\begin{aligned}
 K_{(136,45)} &= ((3.5) + (1.5) + (2.4) + (8.8) + (3.1) + 1)^2 \\
 &= (95 + 1)^2 \\
 &= 9,216
 \end{aligned}$$

$$\begin{aligned}
 K_{(136,269)} &= ((3.4) + (1.2) + (2.5) + (8.8) + (3.1) + 1)^2 \\
 &= (91 + 1)^2 \\
 &= 8,464
 \end{aligned}$$

$$\begin{aligned}
 K_{(354,2)} &= ((4.1) + (4.4) + (3.2) + (8.4) + (2.1) + 1)^2 \\
 &= (60 + 1)^2 \\
 &= 3,721
 \end{aligned}$$

$$\begin{aligned}
 K_{(354,67)} &= ((4.4) + (4.2) + (3.8) + (8.3) + (2.1) + 1)^2 \\
 &= (74 + 1)^2 \\
 &= 5,625
 \end{aligned}$$

$$\begin{aligned}
 K_{(354,8)} &= ((4.3) + (4.3) + (3.4) + (8.3) + (2.2) + 1)^2 \\
 &= (64 + 1)^2 \\
 &= 4,225
 \end{aligned}$$

$$\begin{aligned} K_{(354,105)} &= ((4.5) + (4.4) + (3.2) + (8.8) + (2.1) + 1)^2 \\ &= (108 + 1)^2 \\ &= 11,881 \end{aligned}$$

$$\begin{aligned} K_{(354,136)} &= ((4.3) + (4.1) + (3.2) + (8.8) + (2.3) + 1)^2 \\ &= (92 + 1)^2 \\ &= 8,649 \end{aligned}$$

$$\begin{aligned} K_{(354,354)} &= ((4.4) + (4.4) + (3.3) + (8.8) + (2.2) + 1)^2 \\ &= (109 + 1)^2 \\ &= 12,100 \end{aligned}$$

$$\begin{aligned} K_{(354,25)} &= ((4.5) + (4.4) + (3.3) + (8.8) + (2.1) + 1)^2 \\ &= (111 + 1)^2 \\ &= 12,544 \end{aligned}$$

$$\begin{aligned} K_{(354,42)} &= ((4.4) + (4.4) + (3.4) + (8.8) + (2.2) + 1)^2 \\ &= (112 + 1)^2 \\ &= 12,769 \end{aligned}$$

$$\begin{aligned} K_{(354,127)} &= ((4.4) + (4.4) + (3.4) + (8.8) + (2.1) + 1)^2 \\ &= (110 + 1)^2 \\ &= 12,321 \end{aligned}$$

$$\begin{aligned} K_{(354,141)} &= ((4.5) + (4.4) + (3.5) + (8.8) + (2.1) + 1)^2 \\ &= (117 + 1)^2 \\ &= 13,924 \end{aligned}$$

$$\begin{aligned} K_{(354,318)} &= ((4.5) + (4.5) + (3.5) + (8.6) + (2.1) + 1)^2 \\ &= (105 + 1)^2 \\ &= 11,236 \end{aligned}$$

$$\begin{aligned} K_{(354,504)} &= ((4.5) + (4.5) + (3.4) + (8.6) + (2.1) + 1)^2 \\ &= (102 + 1)^2 \\ &= 10,609 \end{aligned}$$

$$\begin{aligned} K_{(354,45)} &= ((4.5) + (4.5) + (3.4) + (8.8) + (2.1) + 1)^2 \\ &= (118 + 1)^2 \\ &= 14,161 \end{aligned}$$

$$\begin{aligned} K_{(354,269)} &= ((4.4) + (4.2) + (3.5) + (8.8) + (2.1) + 1)^2 \\ &= (105 + 1)^2 \\ &= 11,236 \end{aligned}$$

$$\begin{aligned} K_{(25,2)} &= ((5.1) + (4.4) + (3.2) + (8.4) + (1.1) + 1)^2 \\ &= (60 + 1)^2 \\ &= 3,721 \end{aligned}$$

$$\begin{aligned} K_{(25,67)} &= ((5.4) + (4.2) + (3.8) + (8.3) + (1.1) + 1)^2 \\ &= (77 + 1)^2 \\ &= 6,084 \end{aligned}$$

$$\begin{aligned} K_{(25,8)} &= ((5.3) + (4.3) + (3.4) + (8.3) + (1.2) + 1)^2 \\ &= (65 + 1)^2 \\ &= 4,356 \end{aligned}$$

$$\begin{aligned} K_{(25,105)} &= ((5.5) + (4.4) + (3.2) + (8.8) + (1.1) + 1)^2 \\ &= (112 + 1)^2 \\ &= 12,769 \end{aligned}$$

$$\begin{aligned} K_{(25,136)} &= ((5.3) + (4.1) + (3.2) + (8.8) + (1.3) + 1)^2 \\ &= (92 + 1)^2 \\ &= 8,649 \end{aligned}$$

$$\begin{aligned} K_{(25,354)} &= ((5.4) + (4.4) + (3.3) + (8.8) + (1.2) + 1)^2 \\ &= (111 + 1)^2 \\ &= 12,544 \end{aligned}$$

$$\begin{aligned} K_{(25,25)} &= ((5.5) + (4.4) + (3.3) + (8.8) + (1.1) + 1)^2 \\ &= (115 + 1)^2 \\ &= 13,456 \end{aligned}$$

$$\begin{aligned} K_{(25,42)} &= ((5.4) + (4.4) + (3.4) + (8.8) + (1.2) + 1)^2 \\ &= (114 + 1)^2 \\ &= 13,225 \end{aligned}$$

$$\begin{aligned} K_{(25,127)} &= ((5.4) + (4.4) + (3.4) + (8.8) + (1.1) + 1)^2 \\ &= (113 + 1)^2 \\ &= 12,996 \end{aligned}$$

$$\begin{aligned} K_{(25,141)} &= ((5.5) + (4.4) + (3.5) + (8.8) + (1.1) + 1)^2 \\ &= (125 + 1)^2 \\ &= 15,876 \end{aligned}$$

$$\begin{aligned} K_{(25,318)} &= ((5.5) + (4.5) + (3.5) + (8.6) + (1.1) + 1)^2 \\ &= (109 + 1)^2 \\ &= 12,100 \end{aligned}$$

$$\begin{aligned} K_{(25,504)} &= ((5.5) + (4.5) + (3.4) + (8.6) + (1.1) + 1)^2 \\ &= (106 + 1)^2 \\ &= 11,449 \end{aligned}$$

$$\begin{aligned} K_{(25,45)} &= ((5.5) + (4.5) + (3.4) + (8.8) + (1.1) + 1)^2 \\ &= (122 + 1)^2 \\ &= 15,129 \end{aligned}$$

$$\begin{aligned} K_{(25,269)} &= ((5.4) + (4.2) + (3.5) + (8.8) + (1.1) + 1)^2 \\ &= (108 + 1)^2 \\ &= 11,881 \end{aligned}$$

$$\begin{aligned} K_{(42,2)} &= ((4.1) + (4.4) + (4.2) + (8.4) + (2.1) + 1)^2 \\ &= (62+1)^2 \\ &= 3,969 \end{aligned}$$

$$\begin{aligned} K_{(42,67)} &= ((4.4) + (4.2) + (4.8) + (8.3) + (2.1) + 1)^2 \\ &= (82+1)^2 \\ &= 6,889 \end{aligned}$$

$$\begin{aligned} K_{(42,8)} &= ((4.3) + (4.3) + (4.4) + (8.3) + (2.2) + 1)^2 \\ &= (68+1)^2 \\ &= 4,761 \end{aligned}$$

$$\begin{aligned} K_{(42,105)} &= ((4.5) + (4.4) + (4.2) + (8.8) + (2.1) + 1)^2 \\ &= (110+1)^2 \\ &= 12,321 \end{aligned}$$

$$\begin{aligned} K_{(42,136)} &= ((4.3) + (4.1) + (4.2) + (8.8) + (2.3) + 1)^2 \\ &= (94+1)^2 \\ &= 9,025 \end{aligned}$$

$$\begin{aligned} K_{(42,354)} &= ((4.4) + (4.4) + (4.3) + (8.8) + (2.2) + 1)^2 \\ &= (112+1)^2 \\ &= 12,769 \end{aligned}$$

$$\begin{aligned} K_{(42,25)} &= ((4.5) + (4.4) + (4.3) + (8.8) + (2.1) + 1)^2 \\ &= (114+1)^2 \\ &= 13,225 \end{aligned}$$

$$\begin{aligned} K_{(42,42)} &= ((4.4) + (4.4) + (4.4) + (8.8) + (2.2) + 1)^2 \\ &= (116+1)^2 \\ &= 13,689 \end{aligned}$$

$$\begin{aligned} K_{(42,127)} &= ((4.4) + (4.4) + (4.4) + (8.8) + (2.1) + 1)^2 \\ &= (114+1)^2 \\ &= 13,225 \end{aligned}$$

$$\begin{aligned} K_{(42,141)} &= ((4.5) + (4.4) + (4.5) + (8.8) + (2.1) + 1)^2 \\ &= (122+1)^2 \\ &= 15,129 \end{aligned}$$

$$\begin{aligned} K_{(42,318)} &= ((4.5) + (4.5) + (4.5) + (8.6) + (2.1) + 1)^2 \\ &= (110+1)^2 \\ &= 12,321 \end{aligned}$$

$$\begin{aligned} K_{(42,504)} &= ((4.5) + (4.5) + (4.4) + (8.6) + (2.1) + 1)^2 \\ &= (106+1)^2 \\ &= 11,449 \end{aligned}$$

$$\begin{aligned} K_{(42,45)} &= ((4.5) + (4.5) + (4.4) + (8.8) + (2.1) + 1)^2 \\ &= (122+1)^2 \\ &= 15,129 \end{aligned}$$

$$\begin{aligned} K_{(42,269)} &= ((4.4) + (4.2) + (4.5) + (8.8) + (2.1) + 1)^2 \\ &= (110+1)^2 \\ &= 12,321 \end{aligned}$$

$$\begin{aligned} K_{(127,2)} &= ((4.1) + (4.4) + (4.2) + (8.4) + (1.1) + 1)^2 \\ &= (61+1)^2 \\ &= 3,844 \end{aligned}$$

$$\begin{aligned} K_{(127,67)} &= ((4.4) + (4.2) + (4.8) + (8.3) + (1.1) + 1)^2 \\ &= (81+1)^2 \\ &= 6,724 \end{aligned}$$

$$\begin{aligned} K_{(127,8)} &= ((4.3) + (4.3) + (4.4) + (8.3) + (1.2) + 1)^2 \\ &= (66+1)^2 \\ &= 4,489 \end{aligned}$$

$$\begin{aligned} K_{(127,105)} &= ((4.5) + (4.4) + (4.2) + (8.8) + (1.1) + 1)^2 \\ &= (109+1)^2 \\ &= 12,100 \end{aligned}$$

$$\begin{aligned} K_{(127,136)} &= ((4.3) + (4.1) + (4.2) + (8.8) + (1.3) + 1)^2 \\ &= (91+1)^2 \\ &= 8,464 \end{aligned}$$

$$\begin{aligned} K_{(127,354)} &= ((4.4) + (4.4) + (4.3) + (8.8) + (1.2) + 1)^2 \\ &= (110+1)^2 \\ &= 12,321 \end{aligned}$$

$$\begin{aligned} K_{(127,25)} &= ((4.5) + (4.4) + (4.3) + (8.8) + (1.1) + 1)^2 \\ &= (113+1)^2 \\ &= 12,996 \end{aligned}$$

$$\begin{aligned} K_{(127,42)} &= ((4.4) + (4.4) + (4.4) + (8.8) + (1.2) + 1)^2 \\ &= (114+1)^2 \\ &= 13,225 \end{aligned}$$

$$\begin{aligned} K_{(127,127)} &= ((4.4) + (4.4) + (4.4) + (8.8) + (1.1) + 1)^2 \\ &= (113+1)^2 \\ &= 12,996 \end{aligned}$$

$$\begin{aligned} K_{(127,141)} &= ((4.5) + (4.4) + (4.5) + (8.8) + (1.1) + 1)^2 \\ &= (121+1)^2 \\ &= 14,884 \end{aligned}$$

$$\begin{aligned} K_{(127,318)} &= ((4.5) + (4.5) + (4.5) + (8.6) + (1.1) + 1)^2 \\ &= (109+1)^2 \\ &= 12,100 \end{aligned}$$

$$\begin{aligned} K_{(127,504)} &= ((4.5) + (4.5) + (4.4) + (8.6) + (1.1) + 1)^2 \\ &= (105 + 1)^2 \\ &= 11,236 \end{aligned}$$

$$\begin{aligned} K_{(127,45)} &= ((4.5) + (4.5) + (4.4) + (8.8) + (1.1) + 1)^2 \\ &= (121 + 1)^2 \\ &= 14,884 \end{aligned}$$

$$\begin{aligned} K_{(127,269)} &= ((4.4) + (4.2) + (4.5) + (8.8) + (1.1) + 1)^2 \\ &= (109 + 1)^2 \\ &= 12,100 \end{aligned}$$

$$\begin{aligned} K_{(141,2)} &= ((5.1) + (4.4) + (5.2) + (8.4) + (1.1) + 1)^2 \\ &= (64 + 1)^2 \\ &= 4,225 \end{aligned}$$

$$\begin{aligned} K_{(141,67)} &= ((5.4) + (4.2) + (5.8) + (8.3) + (1.1) + 1)^2 \\ &= (93 + 1)^2 \\ &= 8,836 \end{aligned}$$

$$\begin{aligned} K_{(141,8)} &= ((5.3) + (4.3) + (5.4) + (8.3) + (1.2) + 1)^2 \\ &= (73 + 1)^2 \\ &= 5,476 \end{aligned}$$

$$\begin{aligned} K_{(141,105)} &= ((5.5) + (4.4) + (5.2) + (8.8) + (1.1) + 1)^2 \\ &= (116 + 1)^2 \\ &= 13,689 \end{aligned}$$

$$\begin{aligned} K_{(141,136)} &= ((5.3) + (4.1) + (5.2) + (8.8) + (1.3) + 1)^2 \\ &= (96 + 1)^2 \\ &= 9,409 \end{aligned}$$

$$\begin{aligned} K_{(141,354)} &= ((5.4) + (4.4) + (5.3) + (8.8) + (1.2) + 1)^2 \\ &= (117 + 1)^2 \\ &= 13,924 \end{aligned}$$

$$\begin{aligned} K_{(141,25)} &= ((5.5) + (4.4) + (5.3) + (8.8) + (1.1) + 1)^2 \\ &= (121 + 1)^2 \\ &= 14,884 \end{aligned}$$

$$\begin{aligned} K_{(141,42)} &= ((5.4) + (4.4) + (5.4) + (8.8) + (1.2) + 1)^2 \\ &= (122 + 1)^2 \\ &= 15,129 \end{aligned}$$

$$\begin{aligned} K_{(141,127)} &= ((5.4) + (4.4) + (5.4) + (8.8) + (1.1) + 1)^2 \\ &= (121 + 1)^2 \\ &= 14,884 \end{aligned}$$

$$\begin{aligned} K_{(141,141)} &= ((5.5) + (4.4) + (5.5) + (8.8) + (1.1) + 1)^2 \\ &= (131 + 1)^2 \\ &= 17,424 \end{aligned}$$

$$\begin{aligned} K_{(141,318)} &= ((5.5) + (4.5) + (5.5) + (8.6) + (1.1) + 1)^2 \\ &= (119 + 1)^2 \\ &= 14,400 \end{aligned}$$

$$\begin{aligned} K_{(141,504)} &= ((5.5) + (4.5) + (5.4) + (8.6) + (1.1) + 1)^2 \\ &= (114 + 1)^2 \\ &= 13,225 \end{aligned}$$

$$\begin{aligned} K_{(141,45)} &= ((5.5) + (4.5) + (5.4) + (8.8) + (1.1) + 1)^2 \\ &= (130 + 1)^2 \\ &= 17,161 \end{aligned}$$

$$\begin{aligned} K_{(141,269)} &= ((5.4) + (4.2) + (5.5) + (8.8) + (1.1) + 1)^2 \\ &= (118 + 1)^2 \\ &= 14,161 \end{aligned}$$

$$\begin{aligned} K_{(318,2)} &= ((5.1) + (5.4) + (5.2) + (6.4) + (1.1) + 1)^2 \\ &= (60 + 1)^2 \\ &= 3,721 \end{aligned}$$

$$\begin{aligned} K_{(318,67)} &= ((5.4) + (5.2) + (5.8) + (6.3) + (1.1) + 1)^2 \\ &= (89 + 1)^2 \\ &= 8,100 \end{aligned}$$

$$\begin{aligned} K_{(318,8)} &= ((5.3) + (5.3) + (5.4) + (6.3) + (1.2) + 1)^2 \\ &= (70 + 1)^2 \\ &= 5,041 \end{aligned}$$

$$\begin{aligned} K_{(318,105)} &= ((5.5) + (5.4) + (5.2) + (6.8) + (1.1) + 1)^2 \\ &= (104 + 1)^2 \\ &= 11,025 \end{aligned}$$

$$\begin{aligned} K_{(318,136)} &= ((5.3) + (5.1) + (5.2) + (6.8) + (1.3) + 1)^2 \\ &= (81 + 1)^2 \\ &= 6,724 \end{aligned}$$

$$\begin{aligned} K_{(318,354)} &= ((5.4) + (5.4) + (5.3) + (6.8) + (1.2) + 1)^2 \\ &= (105 + 1)^2 \\ &= 11,236 \end{aligned}$$

$$\begin{aligned} K_{(318,25)} &= ((5.5) + (5.4) + (5.3) + (6.8) + (1.1) + 1)^2 \\ &= (109 + 1)^2 \\ &= 12,100 \end{aligned}$$

$$\begin{aligned} K_{(318,42)} &= ((5.4) + (5.4) + (5.4) + (6.8) + (1.2) + 1)^2 \\ &= (110 + 1)^2 \\ &= 12,321 \end{aligned}$$

$$\begin{aligned} K_{(318,127)} &= ((5.4) + (5.4) + (5.4) + (6.8) + (1.1) + 1)^2 \\ &= (109 + 1)^2 \\ &= 12,100 \end{aligned}$$

$$\begin{aligned} K_{(318,141)} &= ((5.5) + (5.4) + (5.5) + (6.8) + (1.1) + 1)^2 \\ &= (119 + 1)^2 \\ &= 14,400 \end{aligned}$$

$$\begin{aligned} K_{(318,318)} &= ((5.5) + (5.5) + (5.5) + (6.6) + (1.1) + 1)^2 \\ &= (112 + 1)^2 \\ &= 12,769 \end{aligned}$$

$$\begin{aligned} K_{(318,504)} &= ((5.5) + (5.5) + (5.4) + (6.6) + (1.1) + 1)^2 \\ &= (107 + 1)^2 \\ &= 11,664 \end{aligned}$$

$$\begin{aligned} K_{(318,45)} &= ((5.5) + (5.5) + (5.4) + (6.8) + (1.1) + 1)^2 \\ &= (119 + 1)^2 \\ &= 14,400 \end{aligned}$$

$$\begin{aligned} K_{(318,269)} &= ((5.4) + (5.2) + (5.5) + (6.8) + (1.1) + 1)^2 \\ &= (104 + 1)^2 \\ &= 11,025 \end{aligned}$$

$$\begin{aligned} K_{(504,2)} &= ((5.1) + (5.4) + (4.2) + (6.4) + (1.1) + 1)^2 \\ &= (58 + 1)^2 \\ &= 3,481 \end{aligned}$$

$$\begin{aligned} K_{(504,67)} &= ((5.4) + (5.2) + (4.8) + (6.3) + (1.1) + 1)^2 \\ &= (81 + 1)^2 \\ &= 6,724 \end{aligned}$$

$$\begin{aligned} K_{(504,8)} &= ((5.3) + (5.3) + (4.4) + (6.3) + (1.2) + 1)^2 \\ &= (66 + 1)^2 \\ &= 4,489 \end{aligned}$$

$$\begin{aligned} K_{(504,105)} &= ((5.5) + (5.4) + (4.2) + (6.8) + (1.1) + 1)^2 \\ &= (102 + 1)^2 \\ &= 10,609 \end{aligned}$$

$$\begin{aligned} K_{(504,136)} &= ((5.3) + (5.1) + (4.2) + (6.8) + (1.3) + 1)^2 \\ &= (79 + 1)^2 \\ &= 6,400 \end{aligned}$$

$$\begin{aligned} K_{(504,354)} &= ((5.4) + (5.4) + (4.3) + (6.8) + (1.2) + 1)^2 \\ &= (102 + 1)^2 \\ &= 10,609 \end{aligned}$$

$$\begin{aligned} K_{(504,25)} &= ((5.5) + (5.4) + (4.3) + (6.8) + (1.1) + 1)^2 \\ &= (106 + 1)^2 \\ &= 11,449 \end{aligned}$$

$$\begin{aligned} K_{(504,42)} &= ((5.4) + (5.4) + (4.4) + (6.8) + (1.2) + 1)^2 \\ &= (106 + 1)^2 \\ &= 11,449 \end{aligned}$$

$$\begin{aligned} K_{(504,127)} &= ((5.4) + (5.4) + (4.4) + (6.8) + (1.1) + 1)^2 \\ &= (105 + 1)^2 \\ &= 11,236 \end{aligned}$$

$$\begin{aligned} K_{(504,141)} &= ((5.5) + (5.4) + (4.5) + (6.8) + (1.1) + 1)^2 \\ &= (114 + 1)^2 \\ &= 13,225 \end{aligned}$$

$$\begin{aligned} K_{(504,318)} &= ((5.5) + (5.5) + (4.5) + (6.6) + (1.1) + 1)^2 \\ &= (107 + 1)^2 \\ &= 11,664 \end{aligned}$$

$$\begin{aligned} K_{(504,504)} &= ((5.5) + (5.5) + (4.4) + (6.6) + (1.1) + 1)^2 \\ &= (103 + 1)^2 \\ &= 10,816 \end{aligned}$$

$$\begin{aligned} K_{(504,45)} &= ((5.5) + (5.5) + (4.4) + (6.8) + (1.1) + 1)^2 \\ &= (115 + 1)^2 \\ &= 13,456 \end{aligned}$$

$$\begin{aligned} K_{(504,269)} &= ((5.4) + (5.2) + (4.5) + (6.8) + (1.1) + 1)^2 \\ &= (99 + 1)^2 \\ &= 10,000 \end{aligned}$$

$$\begin{aligned} K_{(45,2)} &= ((5.1) + (5.4) + (4.2) + (8.4) + (1.1) + 1)^2 \\ &= (66 + 1)^2 \\ &= 4,489 \end{aligned}$$

$$\begin{aligned} K_{(45,67)} &= ((5.4) + (5.2) + (4.8) + (8.3) + (1.1) + 1)^2 \\ &= (87 + 1)^2 \\ &= 7,744 \end{aligned}$$

$$\begin{aligned} K_{(45,8)} &= ((5.3) + (5.3) + (4.4) + (8.3) + (1.1) + 1)^2 \\ &= (71 + 1)^2 \\ &= 5,184 \end{aligned}$$

$$\begin{aligned} K_{(45,105)} &= ((5.5) + (5.4) + (4.2) + (8.8) + (1.1) + 1)^2 \\ &= (118 + 1)^2 \\ &= 14,161 \end{aligned}$$

$$\begin{aligned} K_{(45,136)} &= ((5.3) + (5.1) + (4.2) + (8.8) + (1.3) + 1)^2 \\ &= (95 + 1)^2 \\ &= 9,216 \end{aligned}$$

$$\begin{aligned}
 K_{(45,354)} &= ((5.4) + (5.4) + (4.3) + (8.8) + (1.2) + 1)^2 \\
 &= (118+1)^2 \\
 &= 14,161
 \end{aligned}$$

$$\begin{aligned}
 K_{(45,25)} &= ((5.5) + (5.4) + (4.3) + (8.8) + (1.1) + 1)^2 \\
 &= (122+1)^2 \\
 &= 15,129
 \end{aligned}$$

$$\begin{aligned}
 K_{(45,42)} &= ((5.4) + (5.4) + (4.4) + (8.8) + (1.2) + 1)^2 \\
 &= (122+1)^2 \\
 &= 15,129
 \end{aligned}$$

$$\begin{aligned}
 K_{(45,127)} &= ((5.4) + (5.4) + (4.4) + (8.8) + (1.1) + 1)^2 \\
 &= (121+1)^2 \\
 &= 14,884
 \end{aligned}$$

$$\begin{aligned}
 K_{(45,141)} &= ((5.5) + (5.4) + (4.5) + (8.8) + (1.1) + 1)^2 \\
 &= (130+1)^2 \\
 &= 17,161
 \end{aligned}$$

$$\begin{aligned}
 K_{(45,318)} &= ((5.5) + (5.5) + (4.5) + (8.6) + (1.1) + 1)^2 \\
 &= (119+1)^2 \\
 &= 14,400
 \end{aligned}$$

$$\begin{aligned}
 K_{(45,504)} &= ((5.5) + (5.5) + (4.4) + (8.6) + (1.1) + 1)^2 \\
 &= (115+1)^2 \\
 &= 13,456
 \end{aligned}$$

$$\begin{aligned}
 K_{(45,45)} &= ((5.5) + (5.5) + (4.4) + (8.8) + (1.1) + 1)^2 \\
 &= (131+1)^2 \\
 &= 17,424
 \end{aligned}$$

$$\begin{aligned}
 K_{(45,269)} &= ((5.4) + (5.2) + (4.5) + (8.8) + (1.1) + 1)^2 \\
 &= (115+1)^2 \\
 &= 13,456
 \end{aligned}$$

$$\begin{aligned}
 K_{(269,2)} &= ((4.1) + (2.4) + (5.2) + (8.4) + (1.1) + 1)^2 \\
 &= (55+1)^2 \\
 &= 3,136
 \end{aligned}$$

$$\begin{aligned}
 K_{(269,67)} &= ((4.4) + (2.2) + (5.8) + (8.3) + (1.1) + 1)^2 \\
 &= (85+1)^2 \\
 &= 7,396
 \end{aligned}$$

$$\begin{aligned}
 K_{(269,8)} &= ((4.3) + (2.3) + (5.4) + (8.3) + (1.2) + 1)^2 \\
 &= (64+1)^2 \\
 &= 4,225
 \end{aligned}$$

$$\begin{aligned}
 K_{(269,105)} &= ((4.5) + (2.4) + (5.2) + (8.8) + (1.1) + 1)^2 \\
 &= (103+1)^2 \\
 &= 10,816
 \end{aligned}$$

$$\begin{aligned}
 K_{(269,136)} &= ((4.3) + (2.1) + (5.2) + (8.8) + (1.3) + 1)^2 \\
 &= (91+1)^2 \\
 &= 8,464
 \end{aligned}$$

$$\begin{aligned}
 K_{(269,354)} &= ((4.4) + (2.4) + (5.3) + (8.8) + (1.2) + 1)^2 \\
 &= (105+1)^2 \\
 &= 11,236
 \end{aligned}$$

$$\begin{aligned}
 K_{(269,25)} &= ((4.5) + (2.4) + (5.3) + (8.8) + (1.1) + 1)^2 \\
 &= (108+1)^2 \\
 &= 11,881
 \end{aligned}$$

$$\begin{aligned}
 K_{(269,42)} &= ((4.4) + (2.4) + (5.4) + (8.8) + (1.2) + 1)^2 \\
 &= (110+1)^2 \\
 &= 12,321
 \end{aligned}$$

$$\begin{aligned}
 K_{(269,127)} &= ((4.4) + (2.4) + (5.4) + (8.8) + (1.1) + 1)^2 \\
 &= (109+1)^2 \\
 &= 12,100
 \end{aligned}$$

$$\begin{aligned}
 K_{(269,141)} &= ((4.5) + (2.4) + (5.5) + (8.8) + (1.1) + 1)^2 \\
 &= (118+1)^2 \\
 &= 14,161
 \end{aligned}$$

$$\begin{aligned}
 K_{(269,318)} &= ((4.5) + (2.5) + (5.5) + (8.6) + (1.1) + 1)^2 \\
 &= (104+1)^2 \\
 &= 11,025
 \end{aligned}$$

$$\begin{aligned}
 K_{(269,504)} &= ((4.5) + (2.5) + (5.4) + (8.6) + (1.1) + 1)^2 \\
 &= (99+1)^2 \\
 &= 10,000
 \end{aligned}$$

$$\begin{aligned}
 K_{(269,45)} &= ((4.5) + (2.5) + (5.4) + (8.8) + (1.1) + 1)^2 \\
 &= (115+1)^2 \\
 &= 13,456
 \end{aligned}$$

$$\begin{aligned}
 K_{(269,269)} &= ((4.4) + (2.2) + (5.5) + (8.8) + (1.1) + 1)^2 \\
 &= (110+1)^2 \\
 &= 12,321
 \end{aligned}$$

Lampiran 5 : Perhitungan Matriks

*Hessian*

$$D[1,1] = 1.1(1 + 0,5^2) = 1,25$$

$$D[1,2] = 1.1(1,928 + 0,5^2) = 2,178$$

$$D[1,3] = 1.1(0,000 + 0,5^2) = 0,25$$

$$D[1,4] = 1.1(1,266 + 0,5^2) = 1,516$$

$$D[1,5] = 1.1(4,658 + 0,5^2) = 4,908$$

$$D[1,6] = 1.1(1,879 + 0,5^2) = 2,129$$

$$D[1,7] = 1.1(4,658 + 0,5^2) = 4,908$$

$$D[1,8] = 1.1(9,357 + 0,5^2) = 9,607$$

$$D[1,9] = 1.1(2,543 + 0,5^2) = 2,793$$

$$D[1,10] = 1.1(1,562 + 0,5^2) = 1,812$$

$$D[1,11] = 1.1(9,357 + 0,5^2) = 9,607$$

$$D[1,12] = 1.1(1,388 + 0,5^2) = 1,638$$

$$D[1,13] = 1.1(8,533 + 0,5^2) = 8,783$$

$$D[1,14] = 1.1(3,139 + 0,5^2) = 3,389$$

$$D[2,1] = 1.1(1,928 + 0,5^2) = 2,178$$

$$D[2,2] = 1.1(1 + 0,5^2) = 1,25$$

$$D[2,3] = 1.1(5,602 + 0,5^2) = 5,852$$

$$D[2,4] = 1.1(2,170 + 0,5^2) = 2,42$$

$$D[2,5] = 1.1(7,984 + 0,5^2) = 8,234$$

$$D[2,6] = 1.1(1,299 + 0,5^2) = 1,549$$

$$D[2,7] = 1.1(1,299 + 0,5^2) = 1,549$$

$$D[2,8] = 1.1(1,053 + 0,5^2) = 1,303$$

$$D[2,9] = 1.1(2,826 + 0,5^2) = 3,076$$

$$D[2,10] = 1.1(1,154 + 0,5^2) = 1,404$$

$$D[2,11] = 1.1(6,914 + 0,5^2) = 7,164$$

$$D[2,12] = 1.1(6,305 + 0,5^2) = 6,555$$

$$D[2,13] = 1.1(7,095 + 0,5^2) = 7,345$$

$$D[2,14] = 1.1(1,713 + 0,5^2) = 1,963$$

$$D[3,1] = 1.1(0,000 + 0,5^2) = 0,25$$

$$D[3,2] = 1.1(5,602 + 0,5^2) = 5,852$$

$$D[3,3] = 1.1(1 + 0,5^2) = 1,25$$

$$D[3,4] = 1.1(6,305 + 0,5^2) = 6,555$$

$$D[3,5] = 1.1(1,713 + 0,5^2) = 1,963$$

$$D[3,6] = 1.1(6,914 + 0,5^2) = 7,164$$

$$D[3,7] = 1.1(1,266 + 0,5^2) = 1,516$$

$$D[3,8] = 1.1(1,879 + 0,5^2) = 2,129$$

$$D[3,9] = 1.1(6,914 + 0,5^2) = 7,164$$

$$D[3,10] = 1.1(1,266 + 0,5^2) = 1,516$$

$$D[3,11] = 1.1(5,602 + 0,5^2) = 5,852$$

$$D[3,12] = 1.1(1,522 + 0,5^2) = 1,772$$

$$D[3,13] = 1.1(1,713 + 0,5^2) = 1,963$$

$$D[3,14] = 1.1(2,543 + 0,5^2) = 2,793$$

$$D[4,1] = 1.1(1,266 + 0,5^2) = 1,516$$

$$D[4,2] = 1.1(2,170 + 0,5^2) = 2,42$$

$$D[4,3] = 1.1(4,658 + 0,5^2) = 4,908$$

$$D[4,4] = 1.1(1 + 0,5^2) = 1,25$$

$$D[4,5] = 1.1(4,139 + 0,5^2) = 4,389$$

$$D[4,6] = 1.1(0,049 + 0,5^2) = 0,299$$

$$D[4,7] = 1.1(0,367 + 0,5^2) = 0,617$$

$$D[4,8] = 1.1(0,002 + 0,5^2) = 0,252$$

$$D[4,9] = 1.1(0,049 + 0,5^2) = 0,299$$

$$D[4,10] = 1.1(0,000 + 0,5^2) = 0,25$$

$$D[4,11] = 1.1(8,315 + 0,5^2) = 8,565$$

$$D[4,12] = 1.1(0,000 + 0,5^2) = 0,25$$

$$D[4,13] = 1.1(0,006 + 0,5^2) = 0,256$$

$$D[4,14] = 1.1(8,315 + 0,5^2) = 8,565$$

$$D[5,1] = 1.1(4,658 + 0,5^2) = 4,908$$

$$D[5,2] = 1.1(7,984 + 0,5^2) = 8,234$$

$$D[5,3] = 1.1(1,713 + 0,5^2) = 1,963$$

$$D[5,4] = 1.1(4,139 + 0,5^2) = 4,389$$

$$\begin{aligned}
D[5,5] &= 1.1(1+0,5^2) = 1,25 & D[7,8] &= 1.1(0,049+0,5^2) = 0,299 \\
D[5,6] &= 1.1(0,000+0,5^2) = 0,25 & D[7,9] &= 1.1(0,135+0,5^2) = 0,385 \\
D[5,7] &= 1.1(1,522+0,5^2) = 1,772 & D[7,10] &= 1.1(0,018+0,5^2) = 0,268 \\
D[5,8] &= 1.1(3,059+0,5^2) = 3,309 & D[7,11] &= 1.1(0,000+0,5^2) = 0,25 \\
D[5,9] &= 1.1(1,522+0,5^2) = 1,772 & D[7,12] &= 1.1(0,002+0,5^2) = 0,252 \\
D[5,10] &= 1.1(5,109+0,5^2) = 5,359 & D[7,13] &= 1.1(0,135+0,5^2) = 0,385 \\
D[5,11] &= 1.1(8,533+0,5^2) = 8,783 & D[7,14] &= 1.1(0,000+0,5^2) = 0,25 \\
D[5,12] &= 1.1(1,266+0,5^2) = 1,516 & D[8,1] &= 1.1(9,357+0,5^2) = 6,607 \\
D[5,13] &= 1.1(6,914+0,5^2) = 7,164 & D[8,2] &= 1.1(1,053+0,5^2) = 1,303 \\
D[5,14] &= 1.1(3,059+0,5^2) = 3,309 & D[8,3] &= 1.1(1,879+0,5^2) = 2,129 \\
D[6,1] &= 1.1(1,879+0,5^2) = 2,129 & D[8,4] &= 1.1(0,002+0,5^2) = 0,252 \\
D[6,2] &= 1.1(1,299+0,5^2) = 1,549 & D[8,5] &= 1.1(3,059+0,5^2) = 3,309 \\
D[6,3] &= 1.1(6,914+0,5^2) = 7,164 & D[8,6] &= 1.1(0,367+0,5^2) = 0,617 \\
D[6,4] &= 1.1(0,049+0,5^2) = 0,299 & D[8,7] &= 1.1(0,049+0,5^2) = 0,299 \\
D[6,5] &= 1.1(0,000+0,5^2) = 0,25 & D[8,8] &= 1.1(1+0,5^2) = 1,25 \\
D[6,6] &= 1.1(1+0,5^2) = 1,25 & D[8,9] &= 1.1(0,367+0,5^2) = 0,617 \\
D[6,7] &= 1.1(0,135+0,5^2) = 0,358 & D[8,10] &= 1.1(0,049+0,5^2) = 0,299 \\
D[6,8] &= 1.1(0,367+0,5^2) = 0,617 & D[8,11] &= 1.1(0,000+0,5^2) = 0,25 \\
D[6,9] &= 1.1(0,135+0,5^2) = 0,385 & D[8,12] &= 1.1(0,000+0,5^2) = 0,25 \\
D[6,10] &= 1.1(0,002+0,5^2) = 0,252 & D[8,13] &= 1.1(0,049+0,5^2) = 0,299 \\
D[6,11] &= 1.1(0,000+0,5^2) = 0,25 & D[8,14] &= 1.1(0,002+0,5^2) = 0,252 \\
D[6,12] &= 1.1(0,000+0,5^2) = 0,25 & D[9,1] &= 1.1(2,543+0,5^2) = 2,793 \\
D[6,13] &= 1.1(0,018+0,5^2) = 0,268 & D[9,2] &= 1.1(2,862+0,5^2) = 3,112 \\
D[6,14] &= 1.1(0,000+0,5^2) = 0,25 & D[9,3] &= 1.1(6,914+0,5^2) = 7,164 \\
D[7,1] &= 1.1(4,658+0,5^2) = 4,908 & D[9,4] &= 1.1(0,006+0,5^2) = 0,256 \\
D[7,2] &= 1.1(1,299+0,5^2) = 1,549 & D[9,5] &= 1.1(1,522+0,5^2) = 1,772 \\
D[7,3] &= 1.1(1,266+0,5^2) = 1,516 & D[9,6] &= 1.1(0,135+0,5^2) = 0,385 \\
D[7,4] &= 1.1(0,367+0,5^2) = 0,617 & D[9,7] &= 1.1(0,135+0,5^2) = 0,385 \\
D[7,5] &= 1.1(1,026+0,5^2) = 1,276 & D[9,8] &= 1.1(0,367+0,5^2) = 0,617 \\
D[7,6] &= 1.1(0,135+0,5^2) = 0,385 & D[9,9] &= 1.1(1+0,5^2) = 1,25 \\
D[7,7] &= 1.1(1+0,5^2) = 1,25 & D[9,10] &= 1.1(0,135+0,5^2) = 0,385
\end{aligned}$$



$$\begin{aligned}
D[9,11] &= 1.1(0,000 + 0,5^2) = 0,25 & D[11,14] &= 1.1(8,315 + 0,5^2) = 8,565 \\
D[9,12] &= 1.1(0,002 + 0,5^2) = 0,252 & D[12,1] &= 1.1(1,388 + 0,5^2) = 1,638 \\
D[9,13] &= 1.1(0,135 + 0,5^2) = 0,385 & D[12,2] &= 1.1(6,305 + 0,5^2) = 6,555 \\
D[9,14] &= 1.1(0,006 + 0,5^2) = 0,256 & D[12,3] &= 1.1(1,522 + 0,5^2) = 1,772 \\
D[10,1] &= 1.1(1,562 + 0,5^2) = 1,812 & D[12,4] &= 1.1(0,000 + 0,5^2) = 0,25 \\
D[10,2] &= 1.1(1,154 + 0,5^2) = 1,404 & D[12,5] &= 1.1(4,139 + 0,5^2) = 4,389 \\
D[10,3] &= 1.1(1,266 + 0,5^2) = 1,516 & D[12,6] &= 1.1(0,000 + 0,5^2) = 0,25 \\
D[10,4] &= 1.1(0,000 + 0,5^2) = 0,25 & D[12,7] &= 1.1(0,002 + 0,5^2) = 0,252 \\
D[10,5] &= 1.1(5,109 + 0,5^2) = 5,359 & D[12,8] &= 1.1(0,000 + 0,5^2) = 0,25 \\
D[10,6] &= 1.1(0,002 + 0,5^2) = 0,252 & D[12,9] &= 1.1(0,002 + 0,5^2) = 0,252 \\
D[10,7] &= 1.1(0,018 + 0,5^2) = 0,268 & D[12,10] &= 1.1(0,002 + 0,5^2) = 0,252 \\
D[10,8] &= 1.1(0,049 + 0,5^2) = 0,299 & D[12,11] &= 1.1(0,367 + 0,5^2) = 0,617 \\
D[10,9] &= 1.1(0,135 + 0,5^2) = 0,385 & D[12,12] &= 1.1(1 + 0,5^2) = 1,25 \\
D[10,10] &= 1.1(1 + 0,5^2) = 1,25 & D[12,13] &= 1.1(0,018 + 0,5^2) = 0,268 \\
D[10,11] &= 1.1(0,006 + 0,5^2) = 0,256 & D[12,14] &= 1.1(3,059 + 0,5^2) = 3,309 \\
D[10,12] &= 1.1(0,002 + 0,5^2) = 0,252 & D[13,1] &= 1.1(8,533 + 0,5^2) = 8,783 \\
D[10,13] &= 1.1(0,135 + 0,5^2) = 0,385 & D[13,2] &= 1.1(7,095 + 0,5^2) = 7,345 \\
D[10,14] &= 1.1(0,006 + 0,5^2) = 0,256 & D[13,3] &= 1.1(4,658 + 0,5^2) = 4,908 \\
D[11,1] &= 1.1(9,357 + 0,5^2) = 9,607 & D[13,4] &= 1.1(0,006 + 0,5^2) = 0,256 \\
D[11,2] &= 1.1(6,914 + 0,5^2) = 7,164 & D[13,5] &= 1.1(6,914 + 0,5^2) = 7,164 \\
D[11,3] &= 1.1(5,602 + 0,5^2) = 5,852 & D[13,6] &= 1.1(0,018 + 0,5^2) = 0,268 \\
D[11,4] &= 1.1(8,315 + 0,5^2) = 8,565 & D[13,7] &= 1.1(0,135 + 0,5^2) = 0,385 \\
D[11,5] &= 1.1(8,533 + 0,5^2) = 8,783 & D[13,8] &= 1.1(0,049 + 0,5^2) = 0,299 \\
D[11,6] &= 1.1(0,000 + 0,5^2) = 0,25 & D[13,9] &= 1.1(0,135 + 0,5^2) = 0,385 \\
D[11,7] &= 1.1(0,000 + 0,5^2) = 0,25 & D[13,10] &= 1.1(0,135 + 0,5^2) = 0,385 \\
D[11,8] &= 1.1(0,000 + 0,5^2) = 0,25 & D[13,11] &= 1.1(0,006 + 0,5^2) = 0,256 \\
D[11,9] &= 1.1(0,25 + 0,5^2) = 0,25 & D[13,12] &= 1.1(0,018 + 0,5^2) = 0,268 \\
D[11,10] &= 1.1(0,006 + 0,5^2) = 0,256 & D[13,13] &= 1.1(1 + 0,5^2) = 1,25 \\
D[11,11] &= 1.1(1 + 0,5^2) = 1,25 & D[13,14] &= 1.1(0,000 + 0,5^2) = 0,25 \\
D[11,12] &= 1.1(0,367 + 0,5^2) = 0,617 & D[14,1] &= 1.1(3,139 + 0,5^2) = 3,389 \\
D[11,13] &= 1.1(0,006 + 0,5^2) = 0,256 & D[14,2] &= 1.1(1,713 + 0,5^2) = 1,963
\end{aligned}$$

$$D[14,3] = 1.1(2,543 + 0,5^2) = 2,793$$

$$D[14,4] = 1.1(8,315 + 0,5^2) = 8,565$$

$$D[14,5] = 1.1(3,059 + 0,5^2) = 3,309$$

$$D[14,6] = 1.1(0,000 + 0,5^2) = 0,25$$

$$D[14,7] = 1.1(0,000 + 0,5^2) = 0,25$$

$$D[14,8] = 1.1(0,002 + 0,5^2) = 0,252$$

$$D[14,9] = 1.1(0,006 + 0,5^2) = 0,256$$

$$D[14,10] = 1.1(0,049 + 0,5^2) = 0,299$$

$$D[14,11] = 1.1(8,315 + 0,5^2) = 8,565$$

$$D[14,12] = 1.1(3,059 + 0,5^2) = 3,309$$

$$D[14,13] = 1.1(0,000 + 0,5^2) = 0,25$$

$$D[14,14] = 1.1(1 + 0,5^2) = 1,25$$



UNIVERSITAS ISLAM NEGERI  
SUMATERA UTARA MEDAN

Lampiran 6 : Perhitungan Nilai *Error* ( $E_i$ ) Pada Iterasi Ke-1 Level 1

$$E_i = (1.0(1,25)) + (1.0(2,178)) + (1.0(0,25)) + (1.0(1,516)) + (1.0(4,908)) + (1.0(2,129)) + (1.0(4,908)) + (1.0(9,607)) + (1.0(2,793)) + (1.0(1,812)) + (1.0(9,607)) + (1.0(1,638)) + (1.0(8,783)) + (1.0(3,389))$$

$$= 0$$

$$E_i = (1.0(2,178)) + (1.0(1,25)) + (1.0(5,852)) + (1.0(2,42)) + (1.0(8,234)) + (1.0(1,549)) + (1.0(1,459)) + (1.0(1,303)) + (1.0(3,076)) + (1.0(1,404)) + (1.0(7,164)) + (1.0(6,555)) + (1.0(7,345)) + (1.0(1,963))$$

$$= 0$$

$$E_i = (1.0(0,25)) + (1.0(5,852)) + (1.0(1,25)) + (1.0(6,555)) + (1.0(1,963)) + (1.0(7,164)) + (1.0(1,516)) + (1.0(2,129)) + (1.0(7,164)) + (1.0(1,516)) + (1.0(5,852)) + (1.0(1,772)) + (1.0(1,963)) + (1.0(2,793))$$

$$= 0$$

$$E_i = (1.0(1,516)) + (1.0(2,42)) + (1.0(4,908)) + (1.0(1,25)) + (1.0(4,389)) + (1.0(0,299)) + (1.0(0,617)) + (1.0(0,252)) + (1.0(0,299)) + (1.0(0,25)) + (1.0(8,565)) + (1.0(0,25)) + (1.0(0,256)) + (1.0(8,565))$$

$$= 0$$

$$E_i = (1.0(4,908)) + (1.0(8,234)) + (1.0(1,963)) + (1.0(4,389)) + (1.0(1,25)) + (1.0(0,25)) + (1.0(1,772)) + (1.0(3,309)) + (1.0(1,772)) + (1.0(5,359)) + (1.0(8,783)) + (1.0(1,516)) + (1.0(7,164)) + (1.0(3,309))$$

$$= 0$$

$$E_i = (1.0(2,129)) + (1.0(1,549)) + (1.0(7,164)) + (1.0(0,299)) + (1.0(0,25)) + (1.0(1,25)) + (1.0(0,385)) + (1.0(0,617)) + (1.0(0,385)) + (1.0(0,252)) + (1.0(0,25)) + (1.0(0,25)) + (1.0(0,268)) + (1.0(0,25))$$

$$= 0$$

$$E_i = (1.0(4,908)) + (1.0(1,549)) + (1.0(1,516)) + (1.0(0,617)) + (1.0(1,276)) + (1.0(0,385)) + (1.0(1,25)) + (1.0(0,299)) + (1.0(0,385)) + (1.0(0,268)) + (1.0(0,25)) + (1.0(0,252)) + (1.0(0,385)) + (1.0(0,25))$$

$$= 0$$

$$E_i = (1.0(6,607)) + (1.0(1,303)) + (1.0(2,129)) + (1.0(0,252)) + (1.0(3,309)) + (1.0(0,617)) + (1.0(0,299)) + (1.0(1,25)) + (1.0(0,617)) + (1.0(0,299)) + (1.0(0,25)) + (1.0(0,25)) + (1.0(0,299)) + (1.0(0,252))$$

$$= 0$$

$$\begin{aligned}
E_i &= (1.0(2,793)) + (1.0(3,112)) + (1.0(7,164)) + (1.0(0,256)) + (1.0(1,772)) + \\
&+ (1.0(0,385)) + (1.0(0,385)) + (1.0(0,617)) + (1.0(1,25)) + (1.0(0,385)) + \\
&+ (1.0(0,25)) + (1.0(0,252)) + (1.0(0,385)) + (1.0(0,256)) \\
&= 0
\end{aligned}$$

$$\begin{aligned}
E_i &= (1.0(1,812)) + (1.0(1,404)) + (1.0(1,516)) + (1.0(0,25)) + (1.0(5,359)) + \\
&+ (1.0(0,252)) + (1.0(0,268)) + (1.0(0,299)) + (1.0(0,385)) + (1.0(1,25)) + \\
&+ (1.0(0,256)) + (1.0(0,252)) + (1.0(0,385)) + (1.0(0,256)) \\
&= 0
\end{aligned}$$

$$\begin{aligned}
E_i &= (1.0(9,607)) + (1.0(7,164)) + (1.0(5,852)) + (1.0(8,565)) + (1.0(8,783)) + \\
&+ (1.0(0,25)) + (1.0(0,25)) + (1.0(0,25)) + (1.0(0,25)) + (1.0(0,256)) + \\
&+ (1.0(1,25)) + (1.0(0,617)) + (1.0(0,256)) + (1.0(8,565)) \\
&= 0
\end{aligned}$$

$$\begin{aligned}
E_i &= (1.0(1,638)) + (1.0(6,555)) + (1.0(1,772)) + (1.0(0,25)) + (1.0(4,389)) + \\
&+ (1.0(0,25)) + (1.0(0,252)) + (1.0(0,25)) + (1.0(0,252)) + (1.0(0,252)) + \\
&+ (1.0(0,617)) + (1.0(1,25)) + (1.0(0,268)) + (1.0(3,309)) \\
&= 0
\end{aligned}$$

$$\begin{aligned}
E_i &= (1.0(8,783)) + (1.0(7,345)) + (1.0(4,908)) + (1.0(0,256)) + (1.0(7,164)) + \\
&+ (1.0(0,268)) + (1.0(0,385)) + (1.0(0,299)) + (1.0(0,385)) + (1.0(0,385)) + \\
&+ (1.0(0,256)) + (1.0(0,268)) + (1.0(1,25)) + (1.0(0,25)) \\
&= 0
\end{aligned}$$

$$\begin{aligned}
E_i &= (1.0(3,389)) + (1.0(1,963)) + (1.0(2,793)) + (1.0(8,565)) + (1.0(3,309)) + \\
&+ (1.0(0,25)) + (1.0(0,25)) + (1.0(0,252)) + (1.0(0,256)) + (1.0(0,299)) + \\
&+ (1.0(8,565)) + (1.0(3,309)) + (1.0(0,25)) + (1.0(1,25)) \\
&= 0
\end{aligned}$$

Lampiran 7 : Hasil Perhitungan Nilai  $\delta\alpha_i$  Pada Iterasi 1 Level 1

$$\delta\alpha_1 = \min\{\max[0,008(1-0)-0]1-0\} \quad \delta\alpha_2 = \min\{\max[0,008(1-0)-0]1-0\} \\ = 0,008 \quad \quad \quad = 0,008$$

$$\delta\alpha_3 = \min\{\max[0,008(1-0)-0]1-0\} \quad \delta\alpha_4 = \min\{\max[0,008(1-0)-0]1-0\} \\ = 0,008 \quad \quad \quad = 0,008$$

$$\delta\alpha_5 = \min\{\max[0,008(1-0)-0]1-0\} \quad \delta\alpha_6 = \min\{\max[0,008(1-0)-0]1-0\} \\ = 0,008 \quad \quad \quad = 0,008$$

$$\delta\alpha_7 = \min\{\max[0,008(1-0)-0]1-0\} \quad \delta\alpha_8 = \min\{\max[0,008(1-0)-0]1-0\} \\ = 0,008 \quad \quad \quad = 0,008$$

$$\delta\alpha_9 = \min\{\max[0,008(1-0)-0]1-0\} \quad \delta\alpha_{10} = \min\{\max[0,008(1-0)-0]1-0\} \\ = 0,008 \quad \quad \quad = 0,008$$

$$\delta\alpha_{11} = \min\{\max[0,008(1-0)-0]1-0\} \quad \delta\alpha_{12} = \min\{\max[0,008(1-0)-0]1-0\} \\ = 0,008 \quad \quad \quad = 0,008$$

$$\delta\alpha_{13} = \min\{\max[0,008(1-0)-0]1-0\} \quad \delta\alpha_{14} = \min\{\max[0,008(1-0)-0]1-0\} \\ = 0,008 \quad \quad \quad = 0,008$$

Lampiran 8 : Hasil Perhitungan Nilai  $\alpha_i$  Pada Iterasi 1 Level 1

$$\alpha_1 = 0 + 0,008 = 0,008$$

$$\alpha_2 = 0 + 0,008 = 0,008$$

$$\alpha_3 = 0 + 0,008 = 0,008$$

$$\alpha_4 = 0 + 0,008 = 0,008$$

$$\alpha_5 = 0 + 0,008 = 0,008$$

$$\alpha_6 = 0 + 0,008 = 0,008$$

$$\alpha_7 = 0 + 0,008 = 0,008$$

$$\alpha_8 = 0 + 0,008 = 0,008$$

$$\alpha_9 = 0 + 0,008 = 0,008$$

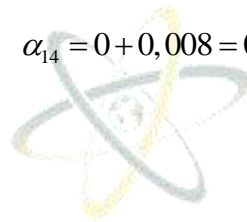
$$\alpha_{10} = 0 + 0,008 = 0,008$$

$$\alpha_{11} = 0 + 0,008 = 0,008$$

$$\alpha_{12} = 0 + 0,008 = 0,008$$

$$\alpha_{13} = 0 + 0,008 = 0,008$$

$$\alpha_{14} = 0 + 0,008 = 0,008$$



Lampiran 9 : Hasil Perhitungan Nilai  $E_i$  Pada Iterasi 2 Level 1

$$\begin{aligned}
 E_1 &= (1.0,008(1,25)) + (1.0,008(2,178)) + (1.0,008(0,25)) + (1.0,008(1,516)) + \\
 &(1.0,008(4,908)) + (1.0,008(2,129)) + (1.0,008(4,908)) + (1.0,008(9,607)) + \\
 &(1.0,008(2,793)) + (1.0,008(1,812)) + (1.0,008(9,607)) + (1.0,008(1,638)) + \\
 &(1.0,008(8,783)) + (1.0,008(3,389)) \\
 &= 0,01 + 0,0174 + 0,002 + 0,0121 + 0,0392 + 0,0170 + 0,0392 + 0,0768 + 0,0223 \\
 &+ 0,0144 + 0,0768 + 0,0131 + 0,0702 + 0,0271 \\
 &= 0,4381
 \end{aligned}$$

$$\begin{aligned}
 E_2 &= (1.0,008(2,178)) + (1.0,008(1,25)) + (1.0,008(5,852)) + (1.0,008(2,42)) + \\
 &(1.0,008(8,234)) + (1.0,008(1,549)) + (1.0,008(1,549)) + (1.0,008(1,303)) + \\
 &(1.0,008(3,076)) + (1.0,008(1,404)) + (1.0,008(7,164)) + (1.0,008(6,555)) + \\
 &(1.0,008(7,345)) + (1.0,008(1,963)) \\
 &= 0,0174 + 0,01 + 0,0468 + 0,0193 + 0,0658 + 0,0123 + 0,0123 + 0,0104 + 0,0246 \\
 &+ 0,0112 + 0,0573 + 0,0524 + 0,0587 + 0,0157 \\
 &= 0,4143
 \end{aligned}$$

$$\begin{aligned}
 E_3 &= (1.0,008(0,25)) + (1.0,008(5,852)) + (1.0,008(1,25)) + (1.0,008(6,555)) + \\
 &(1.0,008(1,963)) + (1.0,008(7,164)) + (1.0,008(1,516)) + (1.0,008(2,129)) + \\
 &(1.0,008(7,164)) + (1.0,008(1,516)) + (1.0,008(5,852)) + (1.0,008(1,772)) + \\
 &(1.0,008(1,963)) + (1.0,008(2,793)) \\
 &= 0,002 + 0,0468 + 0,01 + 0,0524 + 0,0157 + 0,0573 + 0,0121 + 0,0170 + 0,0573 \\
 &+ 0,0121 + 0,0468 + 0,0141 + 0,0157 + 0,0223 \\
 &= 0,3819
 \end{aligned}$$

$$\begin{aligned}
 E_4 &= (1.0,008(1,516)) + (1.0,008(2,42)) + (1.0,008(4,908)) + (1.0,008(1,25)) + \\
 &(1.0,008(4,389)) + (1.0,008(0,299)) + (1.0,008(0,617)) + (1.0,008(0,252)) + \\
 &(1.0,008(0,299)) + (1.0,008(0,25)) + (1.0,008(8,565)) + (1.0,008(0,25)) + \\
 &(1.0,008(0,256)) + (1.0,008(8,565)) \\
 &= 0,0121 + 0,0193 + 0,0392 + 0,01 + 0,0351 + 0,0023 + 0,0049 + 0,0020 + 0,0023 \\
 &+ 0,002 + 0,0685 + 0,002 + 0,0020 + 0,0685 \\
 &= 0,2706
 \end{aligned}$$

$$\begin{aligned}
E_5 &= (1.0,008(4,908)) + (1.0,008(8,234)) + (1.0,008(1,963)) + (1.0,008(4,389)) + \\
&(1.0,008(1,25)) + (1.0,008(0,25)) + (1.0,008(1,772)) + (1.0,008(3,309)) + \\
&(1.0,008(1,772)) + (1.0,008(5,359)) + (1.0,008(8,783)) + (1.0,008(1,516)) + \\
&(1.0,008(7,164)) + (1.0,008(3,309)) \\
&= 0,0392 + 0,0658 + 0,0157 + 0,0351 + 0,01 + 0,002 + 0,0141 + 0,0264 + 0,0141 \\
&+ 0,0428 + 0,0702 + 0,0121 + 0,0573 + 0,0264 \\
&= 0,4318
\end{aligned}$$

$$\begin{aligned}
E_6 &= (1.0,008(2,129)) + (1.0,008(1,549)) + (1.0,008(7,164)) + (1.0,008(0,299)) + \\
&(1.0,008(0,25)) + (1.0,008(1,25)) + (1.0,008(0,385)) + (1.0,008(0,617)) + \\
&(1.0,008(0,385)) + (1.0,008(0,252)) + (1.0,008(0,25)) + (1.0,008(0,25)) + \\
&(1.0,008(0,268)) + (1.0,008(0,25)) \\
&= 0,0170 + 0,0123 + 0,0573 + 0,0023 + 0,002 + 0,01 + 0,0030 + 0,0049 + 0,0030 \\
&+ 0,0020 + 0,002 + 0,002 + 0,0021 + 0,002 \\
&= 0,1223
\end{aligned}$$

$$\begin{aligned}
E_7 &= (1.0,008(4,908)) + (1.0,008(1,549)) + (1.0,008(1,516)) + (1.0,008(0,617)) + \\
&(1.0,008(1,276)) + (1.0,008(0,385)) + (1.0,008(1,25)) + (1.0,008(0,299)) + \\
&(1.0,008(0,385)) + (1.0,008(0,268)) + (1.0,008(0,25)) + (1.0,008(0,252)) + \\
&(1.0,008(0,385)) + (1.0,008(0,25)) \\
&= 0,0392 + 0,0123 + 0,0121 + 0,0049 + 0,0102 + 0,0030 + 0,01 + 0,0023 + 0,0030 \\
&+ 0,0021 + 0,002 + 0,0020 + 0,0030 + 0,002 \\
&= 0,1087
\end{aligned}$$

$$\begin{aligned}
E_8 &= (1.0,008(6,607)) + (1.0,008(1,303)) + (1.0,008(2,129)) + (1.0,008(0,252)) + \\
&(1.0,008(3,309)) + (1.0,008(0,617)) + (1.0,008(0,299)) + (1.0,008(1,25)) + \\
&(1.0,008(0,617)) + (1.0,008(0,299)) + (1.0,008(0,25)) + (1.0,008(0,25)) + \\
&(1.0,008(0,299)) + (1.0,008(0,252)) \\
&= 0,0528 + 0,0104 + 0,0170 + 0,0020 + 0,0264 + 0,0049 + 0,0023 + 0,01 + 0,0049 \\
&+ 0,0023 + 0,002 + 0,002 + 0,0023 + 0,0020 \\
&= 0,1418
\end{aligned}$$



$$\begin{aligned}
E_9 &= (1.0,008(2,793)) + (1.0,008(3,112)) + (1.0,008(7,164)) + (1.0,008(0,256)) + \\
&(1.0,008(1,772)) + (1.0,008(0,385)) + (1.0,008(0,385)) + (1.0,008(0,617)) + \\
&(1.0,008(1,25)) + (1.0,008(0,385)) + (1.0,008(0,25)) + (1.0,008(0,252)) + \\
&(1.0,008(0,385)) + (1.0,008(0,256)) \\
&= 0,0223 + 0,0248 + 0,0573 + 0,0020 + 0,0141 + 0,0030 + 0,0030 + 0,0049 + 0,01 \\
&+ 0,0030 + 0,002 + 0,0020 + 0,0030 + 0,0020 \\
&= 0,1540
\end{aligned}$$

$$\begin{aligned}
E_{10} &= (1.0,008(1,812)) + (1.0,008(1,404)) + (1.0,008(1,516)) + (1.0,008(0,25)) + \\
&(1.0,008(5,359)) + (1.0,008(0,252)) + (1.0,008(0,268)) + (1.0,008(0,299)) + \\
&(1.0,008(0,385)) + (1.0,008(1,25)) + (1.0,008(0,256)) + (1.0,008(0,252)) + \\
&(1.0,008(0,385)) + (1.0,008(0,256)) \\
&= 0,0144 + 0,0112 + 0,0121 + 0,002 + 0,0428 + 0,0020 + 0,0021 + 0,0023 + 0,0030 \\
&+ 0,01 + 0,0020 + 0,0020 + 0,0030 + 0,0020 \\
&= 0,1115
\end{aligned}$$

$$\begin{aligned}
E_{11} &= (1.0,008(9,607)) + (1.0,008(7,164)) + (1.0,008(5,852)) + (1.0,008(8,565)) + \\
&(1.0,008(8,783)) + (1.0,008(0,25)) + (1.0,008(0,25)) + (1.0,008(0,25)) + \\
&(1.0,008(0,25)) + (1.0,008(0,256)) + (1.0,008(1,25)) + (1.0,008(0,617)) + \\
&(1.0,008(0,256)) + (1.0,008(8,565)) \\
&= 0,0768 + 0,0573 + 0,0468 + 0,0685 + 0,0702 + 0,002 + 0,002 + 0,002 + 0,002 \\
&+ 0,0020 + 0,01 + 0,0049 + 0,0020 + 0,0685 \\
&= 0,4153
\end{aligned}$$

$$\begin{aligned}
E_{12} &= (1.0,008(1,638)) + (1.0,008(6,555)) + (1.0,008(1,772)) + (1.0,008(0,25)) + \\
&(1.0,008(4,389)) + (1.0,008(0,25)) + (1.0,008(0,252)) + (1.0,008(0,25)) + \\
&(1.0,008(0,252)) + (1.0,008(0,252)) + (1.0,008(0,617)) + (1.0,008(1,25)) + \\
&(1.0,008(0,268)) + (1.0,008(3,309)) \\
&= 0,0131 + 0,0524 + 0,0141 + 0,002 + 0,0351 + 0,002 + 0,0020 + 0,002 + 0,0020 \\
&+ 0,0020 + 0,0049 + 0,01 + 0,0021 + 0,0264 \\
&= 0,1704
\end{aligned}$$

$$\begin{aligned}
E_{13} &= (1.0,008(8,783)) + (1.0,008(7,345)) + (1.0,008(4,908)) + (1.0,008(0,256)) + \\
&(1.0,008(7,164)) + (1.0,008(0,268)) + (1.0,008(0,385)) + (1.0,008(0,299)) + \\
&(1.0,008(0,385)) + (1.0,008(0,385)) + (1.0,008(0,256)) + (1.0,008(0,268)) + \\
&(1.0,008(1,25)) + (1.0,008(0,25)) \\
&= 0,0702 + 0,0587 + 0,0392 + 0,0020 + 0,0573 + 0,0021 + 0,0030 + 0,0023 + 0,0030 \\
&+ 0,0030 + 0,0020 + 0,0021 + 0,01 + 0,002 \\
&= 0,2576
\end{aligned}$$

$$\begin{aligned}
E_{14} &= (1.0,008(3,389)) + (1.0,008(1,963)) + (1.0,008(2,793)) + (1.0,008(8,565)) + \\
&(1.0,008(3,309)) + (1.0,008(0,25)) + (1.0,008(0,25)) + (1.0,008(0,252)) + \\
&(1.0,008(0,256)) + (1.0,008(0,299)) + (1.0,008(8,565)) + (1.0,008(3,309)) + \\
&(1.0,008(0,25)) + (1.0,008(1,25)) \\
&= 0,0271 + 0,0157 + 0,0223 + 0,0685 + 0,0264 + 0,002 + 0,002 + 0,0020 + 0,0020 \\
&+ 0,0023 + 0,0685 + 0,0264 + 0,002 + 0,01 \\
&= 0,4786
\end{aligned}$$



Lampiran 10 : Hasil Perhitungan Nilai  $\delta\alpha_i$  Iterasi 2 Level 1

$$\delta\alpha_1 = \min\{\max[0,008(1-0,4381)-0,008]1-0,008\} = -0,0034767616$$

$$\delta\alpha_2 = \min\{\max[0,008(1-0,4143)-0,008]1-0,008\} = -0,0032878848$$

$$\delta\alpha_3 = \min\{\max[0,008(1-0,3819)-0,008]1-0,008\} = -0,0030307584$$

$$\delta\alpha_4 = \min\{\max[0,008(1-0,2706)-0,008]1-0,008\} = -0,0021474816$$

$$\delta\alpha_5 = \min\{\max[0,008(1-0,4318)-0,008]1-0,008\} = -0,0034267648$$

$$\delta\alpha_6 = \min\{\max[0,008(1-0,1223)-0,008]1-0,008\} = -0,0009705728$$

$$\delta\alpha_7 = \min\{\max[0,008(1-0,1087)-0,008]1-0,008\} = -0,0008626432$$

$$\delta\alpha_8 = \min\{\max[0,008(1-0,1418)-0,008]1-0,008\} = -0,0011253248$$

$$\delta\alpha_9 = \min\{\max[0,008(1-0,1540)-0,008]1-0,008\} = -0,001222144$$

$$\delta\alpha_{10} = \min\{\max[0,008(1-0,1115)-0,008]1-0,008\} = -0,000884864$$

$$\delta\alpha_{11} = \min\{\max[0,008(1-0,4153)-0,008]1-0,008\} = -0,0032958208$$

$$\delta\alpha_{12} = \min\{\max[0,008(1-0,1704)-0,008]1-0,008\} = -0,0013522944$$

$$\delta\alpha_{13} = \min\{\max[0,008(1-0,2576)-0,008]1-0,008\} = -0,0020443136$$

$$\delta\alpha_{14} = \min\{\max[0,008(1-0,4786)-0,008]1-0,008\} = -0,0037981696$$

UNIVERSITAS ISLAM NEGERI  
SUMATERA UTARA MEDAN

Lampiran 11 : Hasil Perhitungan Nilai  $\alpha_i$  Iterasi 2 Level 1

$$\alpha_1 = 0,008 + (-0,0034767616) = 0,0045232384$$

$$\alpha_2 = 0,008 + (-0,0032878848) = 0,0047121152$$

$$\alpha_3 = 0,008 + (-0,0030307584) = 0,0049692416$$

$$\alpha_4 = 0,008 + (-0,0021474816) = 0,0058525184$$

$$\alpha_5 = 0,008 + (-0,0034267648) = 0,0045732352$$

$$\alpha_6 = 0,008 + (-0,0009705728) = 0,0070294272$$

$$\alpha_7 = 0,008 + (-0,0008626432) = 0,0071373568$$

$$\alpha_8 = 0,008 + (-0,0011253248) = 0,0068746752$$

$$\alpha_9 = 0,008 + (-0,001222144) = 0,006777856$$

$$\alpha_{10} = 0,008 + (-0,000884864) = 0,007115136$$

$$\alpha_{11} = 0,008 + (-0,0032958208) = 0,0047041792$$

$$\alpha_{12} = 0,008 + (-0,0013522944) = 0,0066477056$$

$$\alpha_{13} = 0,008 + (-0,0020443136) = 0,0059556864$$

$$\alpha_{14} = 0,008 + (-0,0037981696) = 0,0042018304$$

Lampiran 12 : Hasil Perhitungan

Nilai Kernel RBF Data *Testing*

$$\begin{aligned} K(m_{82}, m_2) &= e^{(-1(1-1)^2 + (1-4)^2 + (1-2)^2 + (8-4)^2 + (2-1)^2)} \\ &= e^{(-1.27)} \\ &= e^{-27} \\ &= 1,879 \end{aligned}$$

$$\begin{aligned} K(m_{82}, m_{67}) &= e^{(-1(1-4)^2 + (1-2)^2 + (1-8)^2 + (8-3)^2 + (2-1)^2)} \\ &= e^{(-1.85)} \\ &= e^{-85} \\ &= 1,216 \end{aligned}$$

$$\begin{aligned} K(m_{82}, m_8) &= e^{(-1(1-3)^2 + (1-3)^2 + (1-4)^2 + (8-3)^2 + (2-2)^2)} \\ &= e^{(-1.42)} \\ &= e^{-42} \\ &= 5,749 \end{aligned}$$

$$\begin{aligned} K(m_{82}, m_{105}) &= e^{(-1(1-5)^2 + (1-4)^2 + (1-2)^2 + (8-8)^2 + (2-1)^2)} \\ &= e^{(-1.27)} \\ &= e^{-27} \\ &= 1,879 \end{aligned}$$

$$\begin{aligned} K(m_{82}, m_{136}) &= e^{(-1(1-3)^2 + (1-1)^2 + (1-2)^2 + (8-8)^2 + (2-3)^2)} \\ &= e^{(-1.7)} \\ &= e^{-7} \\ &= 0,000 \end{aligned}$$

$$\begin{aligned} K(m_{82}, m_{354}) &= e^{(-1(1-4)^2 + (1-4)^2 + (1-3)^2 + (8-8)^2 + (2-2)^2)} \\ &= e^{(-1.22)} \\ &= e^{-22} \\ &= 2,789 \end{aligned}$$

$$\begin{aligned} K(m_{82}, m_{25}) &= e^{(-1(1-5)^2 + (1-4)^2 + (1-3)^2 + (8-8)^2 + (2-1)^2)} \\ &= e^{(-1.30)} \\ &= e^{-30} \\ &= 9,357 \end{aligned}$$

$$\begin{aligned} K(m_{82}, m_{42}) &= e^{(-1(1-4)^2 + (1-4)^2 + (1-4)^2 + (8-8)^2 + (2-2)^2)} \\ &= e^{(-1.27)} \\ &= e^{-27} \\ &= 1,879 \end{aligned}$$

$$\begin{aligned} K(m_{82}, m_{127}) &= e^{(-1(1-4)^2 + (1-4)^2 + (1-4)^2 + (8-8)^2 + (2-1)^2)} \\ &= e^{(-1.28)} \end{aligned}$$

$$\begin{aligned} &= e^{-28} \\ &= 6,914 \end{aligned}$$

$$\begin{aligned} K(m_{82}, m_{141}) &= e^{(-1(1-5)^2 + (1-4)^2 + (1-5)^2 + (8-8)^2 + (2-1)^2)} \\ &= e^{(-1.42)} \end{aligned}$$

$$\begin{aligned} &= e^{-42} \\ &= 5,749 \end{aligned}$$

$$\begin{aligned} K(m_{82}, m_{318}) &= e^{(-1(1-5)^2 + (1-5)^2 + (1-5)^2 + (8-6)^2 + (2-1)^2)} \\ &= e^{(-1.53)} \end{aligned}$$

$$\begin{aligned} &= e^{-53} \\ &= 9,602 \end{aligned}$$

$$\begin{aligned} K(m_{82}, m_{504}) &= e^{(-1(1-5)^2 + (1-5)^2 + (1-4)^2 + (8-6)^2 + (2-1)^2)} \\ &= e^{(-1.46)} \end{aligned}$$

$$\begin{aligned} &= e^{-46} \\ &= 1,053 \end{aligned}$$

$$\begin{aligned} K(m_{82}, m_{45}) &= e^{(-1(1-5)^2 + (1-5)^2 + (1-4)^2 + (8-8)^2 + (2-1)^2)} \\ &= e^{(-1.42)} \end{aligned}$$

$$\begin{aligned} &= e^{-42} \\ &= 5,749 \end{aligned}$$

$$\begin{aligned} K(m_{82}, m_{269}) &= e^{(-1(1-4)^2 + (1-2)^2 + (1-5)^2 + (8-8)^2 + (2-1)^2)} \\ &= e^{(-1.27)} \end{aligned}$$

$$\begin{aligned} &= e^{-27} \\ &= 1,879 \end{aligned}$$

### Lampiran 13 : Hasil Perhitungan

#### Kernel Linear Data Testing

$$\begin{aligned}K_{(82,2)} &= (1.1) + (1.4) + (1.2) + (8.4) + (2.1) \\ &= 41 \\ K_{(82,67)} &= (1.4) + (1.2) + (1.8) + (8.3) + (2.1) \\ &= 40 \\ K_{(82,8)} &= (1.3) + (1.3) + (1.4) + (8.3) + (2.2) \\ &= 38 \\ K_{(82,105)} &= (1.5) + (1.4) + (1.2) + (8.8) + (2.1) \\ &= 77 \\ K_{(82,136)} &= (1.3) + (1.1) + (1.2) + (8.8) + (2.3) \\ &= 76 \\ K_{(82,354)} &= (1.4) + (1.4) + (1.3) + (8.8) + (2.2) \\ &= 79 \\ K_{(82,25)} &= (1.5) + (1.4) + (1.3) + (8.8) + (2.1) \\ &= 78 \\ K_{(82,42)} &= (1.4) + (1.4) + (1.4) + (8.8) + (2.2) \\ &= 80 \\ K_{(82,127)} &= (1.4) + (1.4) + (1.4) + (8.8) + (2.1) \\ &= 78 \\ K_{(82,141)} &= (1.5) + (1.4) + (1.5) + (8.8) + (2.1) \\ &= 80 \\ K_{(82,318)} &= (1.5) + (1.5) + (1.5) + (8.6) + (2.1) \\ &= 65 \\ K_{(82,504)} &= (1.5) + (1.5) + (1.4) + (8.6) + (2.1) \\ &= 64 \\ K_{(82,45)} &= (1.5) + (1.5) + (1.4) + (8.8) + (2.1) \\ &= 80 \\ K_{(82,269)} &= (1.4) + (1.2) + (1.5) + (8.8) + (2.1) \\ &= 77\end{aligned}$$

### Lampiran 14 : Hasil Perhitungan

#### Kernel Polynomial Data Testing

$$\begin{aligned}K_{(82,2)} &= ((1.1) + (1.4) + (1.2) + (8.4) + (2.1) + 1)^2 \\ &= (41 + 1)^2 = 1,764 \\ K_{(82,67)} &= ((1.4) + (1.2) + (1.8) + (8.3) + (2.1) + 1)^2 \\ &= (40 + 1)^2 = 1,681 \\ K_{(82,8)} &= ((1.3) + (1.3) + (1.4) + (8.3) + (2.2) + 1)^2 \\ &= (38 + 1)^2 = 1,521 \\ K_{(82,105)} &= ((1.5) + (1.4) + (1.2) + (8.8) + (2.1) + 1)^2 \\ &= (77 + 1)^2 = 6,084 \\ K_{(82,136)} &= ((1.3) + (1.1) + (1.2) + (8.8) + (2.3) + 1)^2 \\ &= (76 + 1)^2 = 5,929 \\ K_{(82,354)} &= ((1.4) + (1.4) + (1.3) + (8.8) + (2.2) + 1)^2 \\ &= (79 + 1)^2 = 6,400 \\ K_{(82,25)} &= ((1.5) + (1.4) + (1.3) + (8.8) + (2.1) + 1)^2 \\ &= (78 + 1)^2 = 6,241 \\ K_{(82,42)} &= ((1.4) + (1.4) + (1.4) + (8.8) + (2.2) + 1)^2 \\ &= (80 + 1)^2 = 6,561 \\ K_{(82,127)} &= ((1.4) + (1.4) + (1.4) + (8.8) + (2.1) + 1)^2 \\ &= (78 + 1)^2 = 6,241 \\ K_{(82,141)} &= ((1.5) + (1.4) + (1.5) + (8.8) + (2.1) + 1)^2 \\ &= (80 + 1)^2 = 6,561 \\ K_{(82,318)} &= ((1.5) + (1.5) + (1.5) + (8.6) + (2.1) + 1)^2 \\ &= (65 + 1)^2 = 4,356 \\ K_{(82,504)} &= ((1.5) + (1.5) + (1.4) + (8.6) + (2.1) + 1)^2 \\ &= (64 + 1)^2 = 4,225 \\ K_{(82,45)} &= ((1.5) + (1.5) + (1.4) + (8.8) + (2.1) + 1)^2 \\ &= (80 + 1)^2 = 6,561 \\ K_{(82,269)} &= ((1.4) + (1.2) + (1.5) + (8.8) + (2.1) + 1)^2 \\ &= (77 + 1)^2 = 6,084\end{aligned}$$

## Lampiran 15 : Input dan Output *RapidMiner*

### a. Input

PENDIDIKAN_AYAH Number	PENDIDIKAN_IBU Number	PENGHASILAN_AYAH Number	PENGHASILAN_IBU Number	JUMLAH_SAUDARA Number	UKT KELOMPOK Category
4	4	2	0	1	UKT 2
2	4	2	4	1	UKT 1
4	5	2	5	1	UKT 2
4	3	2	0	2	UKT 2
3	3	2	0	2	UKT 1
4	4	4	0	1	UKT 4
3	4	0	2	2	UKT 1
3	3	4	3	2	UKT 2
3	3	6	0	2	UKT 4
3	4	3	0	2	UKT 1

5,687 rows - 6 columns (1 nominal, 5 numerical)

**Data Sets**

+ LOAD DATA

**transformasi data 1**  
 //Local Repository/transformasi data 1  
 Rows: 5,687  
 Columns: 6  
 Last Change: None

### b. Output

Result History

ExampleSet (/Local Repository/transformasi data 1) | PerformanceVector (Performance)

	Name	Type	Missing	Statistics	Filter (5 / 6 attributes)	Search for Attributes
Data	PENDIDIKAN_AYAH	Integer	0	Min: 1, Max: 5, Average: 3.763		
Statistics	PENDIDIKAN_IBU	Integer	0	Min: 1, Max: 5, Average: 3.728		
Visualizations	PENGHASILAN_AYAH	Integer	0	Min: 0, Max: 7, Average: 2.338		
Annotations	PENGHASILAN_IBU	Integer	0	Min: 0, Max: 7, Average: 0.821		
	JUMLAH_SAUDARA	Integer	0	Min: 1, Max: 4, Average: 1.435		
	UKT KELOMPOK	Nominal	0	Most: UKT 6 (31) Most: UKT 1 (2651)	Values: UKT 1 (2561), UKT 2 (1894), UKT 4 (857), UKT 7 (132), ...[3 more]	Details...

## PerformanceVector

PerformanceVector:  
 accuracy: 61.33% +/- 1.49% (micro average: 61.33%)  
 ConfusionMatrix:  
 True: UKT 2 UKT 1 UKT 4 UKT 7 UKT 5 UKT 6 UKT 3  
 UKT 2: 829 359 325 25 26 8 11  
 UKT 1: 759 2164 57 32 1 1 72  
 UKT 4: 297 37 468 50 95 22 2  
 UKT 7: 8 1 6 25 2 0 1  
 UKT 5: 1 0 1 0 2 0 0  
 UKT 6: 0 0 0 0 0 0 0  
 UKT 3: 0 0 0 0 0 0 0  
 kappa: 0.393 +/- 0.024 (micro average: 0.393)  
 ConfusionMatrix:  
 True: UKT 2 UKT 1 UKT 4 UKT 7 UKT 5 UKT 6 UKT 3  
 UKT 2: 829 359 325 25 26 8 11  
 UKT 1: 759 2164 57 32 1 1 72  
 UKT 4: 297 37 468 50 95 22 2  
 UKT 7: 8 1 6 25 2 0 1  
 UKT 5: 1 0 1 0 2 0 0  
 UKT 6: 0 0 0 0 0 0 0  
 UKT 3: 0 0 0 0 0 0 0

accuracy: 61.33% +/- 1.49% (micro average: 61.33%)

	true UKT 2	true UKT 1	true UKT 4	true UKT 7	true UKT 5	true UKT 6	true UKT 3	class precision
pred. UKT 2	829	359	325	25	26	8	11	52.37%
pred. UKT 1	759	2164	57	32	1	1	72	70.12%
pred. UKT 4	297	37	468	50	95	22	2	48.20%
pred. UKT 7	8	1	6	25	2	0	1	58.14%
pred. UKT 5	1	0	1	0	2	0	0	50.00%
pred. UKT 6	0	0	0	0	0	0	0	0.00%
pred. UKT 3	0	0	0	0	0	0	0	0.00%
class recall	43.77%	84.50%	54.61%	18.94%	1.59%	0.00%	0.00%	



Confusion Matrix (x: true class, y: pred. class, z: count)

