DETAILS: SERIAL VERSION OF THE CODE

DATASET: AML AND ALL DATASET WITH 7129 SAMPLES AND 34 GENES

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Number of Clusters | Distance Metric | Silhouette Score | Time in Seconds for kmed clustering | Clock Cycles for kmed clustering | Time in seconds for silhoutte score | Clock Cycles for  Silhoutte score |
| K=2 | Manhattan | 0.032087 | 6.266486e-01 | 320844092 | 5.828503e+00 | 2984193407 |
| K=3 | Manhattan | 0.030603 | 9.896591e-01 | 506705473 | 5.180648e+00 | 2652492149 |
| K=4 | Manhattan | 0.039463 | 1.299669e+00 | 665430659 | 5.609314e+00 | 2871969128 |
| K=6 | Manhattan | 0.013255 | 2.381571e+00 | 1219364339 | 4.660488e+00 | 2386169904 |
| K=8 | Manhattan | 0.003616 | 6.055654e+00 | 3100494716 | 4.540165e+00 | 2324564603 |
| K=10 | Manhattan | 0.010874 | 9.374032e+00 | 4799504192 | 4.465045e+00 | 2286103285 |
| K=2 | Euclidean | 0.029956 | 8.275971e-01 | 423729691 | 3.468791e+00 | 1776021093 |
| K=3 | Euclidean | 0.154721 | 1.840949e+00 | 942565677 | 4.347388e+00 | 2225862866 |
| K=4 | Euclidean | 0.061187 | 3.111855e+00 | 1593269805 | 3.877138e+00 | 1985094496 |
| K=6 | Euclidean | 0.039295 | 7.070083e+00 | 3619882406 | 3.731193e+00 | 1910370677 |
| K=8 | Euclidean | 0.019372 | 1.149814e+01 | 5887046886 | 3.281543e+00 | 1680149766 |
| K=10 | Euclidean | 0.009878 | 1.715202e+01 | 8781836652 | 3.213711e+00 | 1645419938 |

DETAILS: SERIAL VERSION OF THE CODE

DATASET: A RICE GENE EXPRESSION MATRIX DATASET WITH 10K SAMPLES AND 35 GENES

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Number of Clusters | Distance Metric | Silhouette Score | Time in Seconds for kmed clustering | Clock Cycles for kmed clustering | Time in seconds for silhouette score | Clock Cycles for  Silhouette score |
| K=2 | Manhattan | 0.675864 | 7.801875e+00 | 3994559856 | 1.134489e+01 | 5808582475 |
| K=3 | Manhattan | 0.543068 | 7.810036e+00 | 3998738453 | 1.022754e+01 | 5236499172 |
| K=4 | Manhattan | 0.545298 | 7.812264e+00 | 3999879547 | 1.023575e+01 | 5240704751 |
| K=6 | Manhattan | 0.282759 | 7.822610e+00 | 4005176431 | 9.098364e+00 | 4658362194 |
| K=8 | Manhattan | 0.326556 | 7.819817e+00 | 4003746381 | 9.042430e+00 | 4629724302 |
| K=10 | Manhattan | 0.330335 | 7.838621e+00 | 4013373734 | 9.413781e+00 | 4819855665 |
| K=2 | Euclidean | 0.466717 | 1.155086e+00 | 591404151 | 6.953496e+00 | 3560189609 |
| K=3 | Euclidean | 0.361662 | 1.716570e+00 | 878883557 | 6.207053e+00 | 3178010931 |
| K=4 | Euclidean | 0.332326 | 2.382985e+00 | 1220088368 | 6.161437e+00 | 3154655753 |
| K=6 | Euclidean | 0.246667 | 3.364711e+00 | 1722732028 | 6.078424e+00 | 3112153174 |
| K=8 | Euclidean | 0.232060 | 4.467896e+00 | 2287562894 | 5.706706e+00 | 2921833206 |
| K=10 | Euclidean | 0.218921 | 5.914463e+00 | 3028204695 | 5.795650e+00 | 2967372504 |