To demonstrate the power of MPI over serial code without sampling genes and using entire gene sample.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Code | Distance\_Metric | Clusters | Time in seconds | Clock Cycles |
| MPI code | Manhattan | 10 | 3.667022e+01 | 18775150515 |
| Serial code | Manhattan | 10 | 8.385659e+02 | 429345733566 |
| MPI code | Euclidean | 10 | 3.683794e+01 | 18861024925 |
| Serial code | Euclidean | 10 | 1.537815e+03 | 787361092526 |

To demonstrate the power of MPI over serial code in reading file - AML Dataset

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Code | Genes | Samples (Gene) | Time in seconds | Clock Cycles |
| MPI code | 7129 | 34 | 2.866060e-02 | 14674228 |
| Serial code | 7129 | 34 | 1.637262e-01 | 83827798 |

To demonstrate the power of MPI over serial code in reading file -RICE DATASET

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Code | Genes | Samples(Gene) | Time in seconds | Clock Cycles |
| MPI code | 10000 | 35 | 4.421063e-02 | 22635841 |
| Serial code | 10000 | 35 | 2.764300e-01 | 141532139 |