**SUMMARY**

## USC ID/s:

## Datapoints

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| M+N | Time in MS (Basic) | Time in MS (Efficient) | Memory in KB (Basic) | Memory in KB (Efficient) |
| 16 | 0.01597 | 0.039101 | 17856 | 18016.0 |
| 64 | 0.15903 | 0.378847 | 17888 | 18016.0 |
| 128 | 0.61798 | 1.388073 | 18016 | 18032.0 |
| 256 | 2.40397 | 5.363941 | 18752 | 18064.0 |
| 384 | 5.48792 | 12.20727 | 19408 | 18096.0 |
| 512 | 9.81569 | 22.15099 | 20576 | 18096.0 |
| 768 | 24.4880 | 49.30806 | 23856 | 18128.0 |
| 1024 | 43.9911 | 90.05427 | 28464 | 18080.0 |
| 1280 | 68.1493 | 145.2150 | 34352 | 18224.0 |
| 1536 | 102.023 | 209.7318 | 41392 | 18016.0 |
| 2048 | 185.535 | 399.9739 | 59904 | 18576.0 |
| 2560 | 293.003 | 610.6942 | 83008 | 18272.0 |
| 3072 | 410.657 | 823.0700 | 111392 | 18256.0 |
| 3584 | 603.755 | 1220.636 | 144976 | 18656.0 |
| 3968 | 698.582 | 1558.127 | 173536 | 18416.0 |

## Insights

### Graph1 – Memory vs Problem Size (M+N)

[Add Graph1 here]

#### Nature of the Graph (Logarithmic/ Linear/ Polynomial/ Exponential)

Basic:

Efficient:

#### Explanation:

### Graph2 – Time vs Problem Size (M+N)

[Add Graph2 here]

#### Nature of the Graph (Logarithmic/ Linear/ Polynomial/ Exponential)

Basic:

Efficient:

#### Explanation:

## Contribution

(Please mention what each member did if you think everyone in the group does not have an equal contribution, otherwise, write “Equal Contribution”)

<USC ID/s>: <Equal Contribution>