**SUMMARY**

## USC ID/s:

## Datapoints

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| M+N | Time in MS (Basic) | Time in MS (Efficient) | Memory in KB (Basic) | Memory in KB (Efficient) |
| 16 | 0.05 |  | 18064 |  |
| 64 | 0.37 |  | 18080 |  |
| 128 | 1.36 |  | 18176 |  |
| 256 | 5.14 |  | 18864 |  |
| 384 | 11.82 |  | 19552 |  |
| 512 | 20.98 |  | 19872 |  |
| 768 | 48.28 |  | 20752 |  |
| 1024 | 88.34 |  | 22240 |  |
| 1280 | 140.84 |  | 22976 |  |
| 1536 | 201.21 |  | 25040 |  |
| 2048 | 368.72 |  | 28928 |  |
| 2560 | 569.30 |  | 36448 |  |
| 3072 | 794.28 |  | 37216 |  |
| 3584 | 1126.44 |  | 41840 |  |
| 3968 | 1410.38 |  | 47808 |  |

## 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>