**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 |  | 18112 |  |
| 64 | 0.38 |  | 18144 |  |
| 128 | 1.43 |  | 18256 |  |
| 256 | 5.55 |  | 18672 |  |
| 384 | 12.42 |  | 19392 |  |
| 512 | 21.65 |  | 19520 |  |
| 768 | 51.91 |  | 19712 |  |
| 1024 | 90.96 |  | 21200 |  |
| 1280 | 143.31 |  | 21968 |  |
| 1536 | 208.34 |  | 23984 |  |
| 2048 | 377.42 |  | 27936 |  |
| 2560 | 635.78 |  | 36192 |  |
| 3072 | 877.56 |  | 47424 |  |
| 3584 | 1167.34 |  | 53392 |  |
| 3968 | 1434.57 |  | 59056 |  |

## 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>