Difference when running computation on Client vs Server Side

Merge Sort

Device 1: Laptop i5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No of Elements | Time Taken (Client) (s) | Chrome Memory usage (max) (k) | Time Taken (Server) (s) | Chrome memory usage (max) (k) |
| 1000000 | 4.7 | 116,148 | 3.5 | 70,024 |
| 5000000 | 24.8 | 724,754 | 20 | 39,436 (~constant) |
| 9000000 | 46 | 906,064 | 36 | 37,744 (~constant) |

Device 2: OnePlus android phone

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No of Elements | Time Taken (Client) (s) | Chrome Memory usage (max) (k) | Time Taken (Server) (s) | Chrome memory usage (max) (k) |
| 1000000 | 4.497 | 95,784 | 3.482 | 39,580 |
| 5000000 | 97.053 | 424,034 | 17.603 | 38,232 (~constant) |
| 9000000 | 224.382 | 492,045 | 35.191 | 42,288 (constant) |