Observations:

Varying FileSize with Constant memory

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Memory Limit(MB) | File Size(MB) | Part1  Phase1 time | Part1  Phase2 time | Part2 4 threads  Phase1 time | Part2 4 threads  Phase2 time |
| 100 | 5 | 0.583 | 0.479(no need) | 0.7 | 0.8 (no need) |
| 100 | 50 | 5.5 | 0.01(no need) | 5.6 | 0.008 (no need) |
| 100 | 500 | 103.91 | 320.06 | 83.09 | 297 |
| 100 | 1024 |  |  | 133.32 | 494.45 |
| 100 | 2048 |  |  |  |  |

Observations:

Varying Memory with Constant fileSize

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Memory Limit(MB) | File Size(MB) | Part1  Phase1 time | Part1  Phase2 time | Part2 4 threads  Phase1 time | Part2 4 threads  Phase2 time |
| 25 | 500 |  |  |  |  |
| 100 | 500 |  |  |  |  |
| 250 | 500 |  |  |  |  |
| 500 | 500 |  |  |  |  |
| 600 | 500 |  |  |  |  |