

Homework #5

| Parallel Tread | Prefetch Buffer Size | Mean | Standard Deviation |
|----------------|----------------------|---------|--------------------|
| 128 | 2 | 290.70 | 142.64 |
| 128 | 4 | 369.08 | 243.06 |
| 128 | 8 | 205.00 | 127.08 |
| 128 | 16 | 198.91 | 157.17 |
| 64 | 2 | 749.16 | 109.07 |
| 64 | 4 | 856.61 | 123.94 |
| 64 | 8 | 987.68 | 56.96 |
| 64 | 16 | 271.15 | 125.34 |
| 32 | 2 | 685.68 | 165.98 |
| 32 | 4 | 737.25 | 357.66 |
| 32 | 8 | 1070.36 | 17.89 |
| 32 | 16 | 473.02 | 215.75 |
| 16 | 8 | 1050.46 | 129.14 |

I tried above combinations of number of parallel threads and prefetch buffer sizes and found that 32 parallel threads and 8 prefetch buffer size gives the best mean images/s and standard deviation.