Graphs: I couldn’t include the 1,000,000,000 sized array since why laptop couldn’t resist :)

Count\_race.c:

Count\_mutex.c

Count\_private.c

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Count\_ race: |  |  |  |  |  |  |  |
| Size/Threads | 1 | 2 | 4 | 8 | 16 | 32 | 64 |
| 100 | 0.024 | 0.032 | 0.046 | 0.082 | 0.151 | 0.293 | 0.59 |
| 10,000 | 0.069 | 0.075 | 0.043 | 0.09 | 0.144 | 0.347 | 0.645 |
| 100,000 | 0.433 | 0.47 | 0.488 | 0.52 | 0.548 | 0.701 | 1.07 |
| 1,000,000 | 3.77 | 4.234 | 4.094 | 4.015 | 4.049 | 4.079 | 4.169 |
| 10,000,000 | 36.4 | 41.8 | 40.7 | 39.8 | 40.32 | 40.37 | 40.961 |
| 100,000,000 | 366.12 | 410.127 | 400.178 | 399.118 | 399.84 | 400.26 | 400.137 |

Count\_mutex:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Size/Threads | 1 | 2 | 4 | 8 | 16 | 32 | 64 |
| 100 | 0.024 | 0.032 | 0.044 | 0.088 | 0.148 | 0.295 | 0.619 |
| 10,000 | 0.099 | 0.072 | 0.088 | 0.12 | 0.174 | 0.338 | 0.616 |
| 100,000 | 0.386 | 0.383 | 0.424 | 0.429 | 0.485 | 0.63 | 0.946 |
| 1,000,000 | 3.525 | 3.553 | 3.454 | 3.452 | 3.481 | 3.552 | 3.593 |
| 10,000,000 | 33.593 | 33.443 | 34.205 | 34.045 | 34.7 | 34.006 | 33.57 |
| 100,000,000 | 338.534 | 338.34 | 338.12 | 338.15 | 338.45 | 338.741 | 338.142 |

Count\_private:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Size/Threads | 1 | 2 | 4 | 8 | 16 | 32 | 64 |
| 100 | 0.032 | 0.034 | 0.089 | 0.098 | 0.168 | 0.319 | 0.699 |
| 10,000 | 0.072 | 0.073 | 0.08 | 0.11 | 0.185 | 0.326 | 0.629 |
| 100,000 | 0.433 | 0.413 | 0.43 | 0.482 | 0.546 | 0.699 | 1.009 |
| 1,000,000 | 3.809 | 3.529 | 3.4 | 3.42 | 3.458 | 3.591 | 3.879 |
| 10,000,000 | 38.01 | 34.97 | 31.1 | 34.45 | 33.84 | 35.61 | 37.417 |
| 100,000,000 | 338.142 | 338.147 | 338.154 | 338.247 | 338.159 | 338.475 | 339.065 |