Homework #3

Wooseok Kim

Part 3

Table1: Varying threads, fixed pushes

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| N of Threads | Iterations | Serial Time | Parallel Time | SpeedUP |
| 5 | 100 | 59 | 769 | 0.077 |
| 10 | 100 | 59 | 924 | 0.064 |
| 20 | 100 | 59 | 1872 | 0.032 |
| 40 | 100 | 59 | 2617 | 0.023 |
| 50 | 100 | 59 | 3186 | 0.019 |
| 100 | 100 | 59 | 8436 | 0.007 |

Table2: Fixed threads varying pushes

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| N of Threads | Iterations | Serial Time | Parallel Time | SpeedUP |
| 25 | 10 | 3 | 2736 | 0.001 |
| 25 | 25 | 8 | 2524 | 0.003 |
| 25 | 50 | 33 | 2263 | 0.015 |
| 25 | 100 | 57 | 1995 | 0.029 |
| 25 | 150 | 88 | 1533 | 0.057 |
| 25 | 200 | 114 | 1422 | 0.080 |

Table3: Varying number of threads and varying pushes

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| N of Threads | Iterations | Serial Time | Parallel Time | SpeedUP |
| 10 | 20 | 7 | 854 | 0.008 |
| 20 | 40 | 12 | 1322 | 0.009 |
| 30 | 60 | 35 | 1991 | 0.018 |
| 40 | 100 | 57 | 2483 | 0.023 |
| 50 | 150 | 88 | 2995 | 0.029 |
| 100 | 200 | 114 | 8828 | 0.013 |