|  |  |  |  |
| --- | --- | --- | --- |
| Test file: medium.txt | | | |
| # threads | #Observed timing | Observer speed up compared | Expected speed up |
| Original program | 51.552 | 1.0 | 1.0 |
| 1 | 53.140 | 1.0 | 1.0 |
| 2 | 26.598 | 2.0 | 2.0 |
| 3 | 17.757 | 3.0 | 3.0 |
| 4 | 13.442 | 4.0 | 4.0 |
| 8 | 13.269 | 4.0 | 8.0 |
| 16 | 13.285 | 4.0 | 16.0 |

30053278 Juwei Wang

I got the speedup result as the same as I image. But the speed up is not always booting as the server has limited cores. So I cannot run much faster than 4.0 as my server only have four cores. The device can only handle 4 threads once time.

|  |  |  |  |
| --- | --- | --- | --- |
| Test file: hard.txt | | | |
| # threads | #Observed timing | Observer speed up compared | Expected speed up |
| Original program | 17.427 | 1.0 | 1.0 |
| 1 | 18.085 | 1,0 | 1.0 |
| 2 | 9.052 | 2.0 | 2.0 |
| 3 | 6.045 | 3.0 | 3.0 |
| 4 | 4.543 | 4.0 | 4.0 |
| 8 | 4.643 | 4.0 | 8.0 |
| 16 | 4.533 | 4.0 | 16.0 |

|  |  |  |  |
| --- | --- | --- | --- |
| Test file: hard2.txt | | | |
| # threads | #Observed timing | Observer speed up compared | Expected speed up |
| Original program | 17.544 | 1.0 | 1.0 |
| 1 | 18.077 | 1.0 | 1.0 |
| 2 | 9.043 | 2.0 | 2.0 |
| 3 | 6.034 | 3.0 | 3.0 |
| 4 | 4.538 | 4.0 | 4.0 |
| 8 | 4.449 | 4.0 | 8.0 |
| 16 | 4.41 | 4.0 | 16.0 |