Fall 2021 COP5615

Project 1 Report

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1.

|  |  |  |  |
| --- | --- | --- | --- |
| Work Unit | CPU | REAL | CPU utilization |
| 95 | 22.502 | 9.713 | 2.317 |
| 108 | 15.345 | 6.227 | 2.464 |
| 1072 | 0.806 | 0.402 | 2.005 |
| 10717 | 0.632 | 0.359 | 1.760 |
| 107172 | 0.503 | 0.328 | 1.534 |

Based on the table as above, the larger size of work unit is, the relative lower ratio we get.

When the work unit is 108, the performance for our implementation is the best because the ratio is the highest.

2.

The result of running your program for input 4 is:

Text

Description automatically generated

3.

Text

Description automatically generated

Ratio = CPU / Real = 16.627 / 6.782 = 2.452

4.

The coin with the most 0s we managed to find is 4.

5.

The largest number of working machines we were able to run our code with is 1.