Question 6

First Execution:

5022564 us Task 1 running 6022740 us

Execution time = 6022740 us - 5022564 us = 1000176 us

Second Execution:

10024368 us Task 1 running 11024549 us

Execution time = 11024549 us - 10024368 us = 1000181 us

Third Execution:

20028085 us Task 1 running 21028266 us

Execution time = 21028266 us - 20028085 us = 1000181 us

From these three executions of Task 1, the average execution time was 1000238 us.

With Task 1's implementation almost equivalent to Tasks 2 to 5 (only differing by their task number), we could incorporate their runtimes to further determine the average execution time of each task.

Task 2

1021110 us Task 2 running 2021287 us

Runtime = 2021287 us - 1021110 us = 1000177 us

Task 3

6022902 us Task 3 running 7023084 us

Runtime = 7023084 us - 6022902 us = 1000182 us

Task 4

11024716 us Task 4 running 12024858 us

Runtime = 12024858 us - 11024716 us = 1000142 us

With the execution time of these tasks included, the average execution time of each task is 1000203 us.