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Assingment 04

Thread Creation (2 Threads)

[illegible]

Thread Creation (4 Threads):

[illegible]

Thread Handling

```
(base) hassan@hassan-Latitude-E7450:assignment 4$ gcc thread-handler.c -o thread-handler -lpthread && ./thread-handler
Starting thread: 1
Starting thread: 0
Thread 1, counter = 1449238
Thread 0, counter = 1452779
-----
Final counter value: 1452779
Error: 547221
(base) hassan@hassan-Latitude-E7450:assignment 4$ gcc thread-handler.c -o thread-handler -lpthread && ./thread-handler
Starting thread: 0
Starting thread: 1
Thread 1, counter = 848144
Thread 0, counter = 917362
-----
Final counter value: 917362
Error: 1082638
(base) hassan@hassan-Latitude-E7450:assignment 4$ gcc thread-handler.c -o thread-handler -lpthread && ./thread-handler
Starting thread: 0
Starting thread: 1
Thread 0, counter = 959662
Thread 1, counter = 1014636
-----
Final counter value: 1014636
Error: 985364
(base) hassan@hassan-Latitude-E7450:assignment 4$ gcc thread-handler.c -o thread-handler -lpthread && ./thread-handler
Starting thread: 0
Starting thread: 1
Thread 1, counter = 742076
Thread 0, counter = 1001521
-----
Final counter value: 1001521
Error: 998479
(base) hassan@hassan-Latitude-E7450:assignment 4$
```

Answers:

1. The Value of Counter variable should be the sum of Thread0 and Thread1
2. Thread0.
3. It is about roughly 70 - 80% and the value of error is different when its running multiple times.
4. I get about 0.022000 ms.

```
(base) hassan@hassan-Latitude-E7450:assignment 4$ chmod +x runner.sh
(base) hassan@hassan-Latitude-E7450:assignment 4$ ./runner.sh
Threads Average Running Time
user 0.022000
(base) hassan@hassan-Latitude-E7450:assignment 4$
```