

Introduction :

This assignment contains these three exercises :

CPU Simulator: Simulate a single core CPU and schedule tasks to run on a thread

Find Multiples: write a multithreaded program to find all integers in a given range that are divisible by 3, 5, or 7. Return the sum of all unique integers.

Use Interrupts: Analyze the provided code and add interrupts where a thread must be terminated. Handle each interrupt in its respective thread.

that I finished first and second one .

this was are first assignment of multithreading and it's main purpose was for us to learn it properly .

Design and Implementation :

For the first exercise ,I mad an array of time's of threads and then sort them after that I wrote two for loops in each other that found related thread to each time and run it.

For the second exercise ,I wrote three runnable classes that mad a list of 3,5and 7 counters and in the get sum method I mad them threads and start them at last I combined the lists.

Testing :

First exercise run correctly and passed all the tests from the beginning but the second faild them and it returned sum as 0 that fixed it by using thread.join.

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