CSE 4510, Section B Lab Test 2, Topic: IPC

1. You are given a code snippet in the test1.c file. You need to modify the function "task_function" to simulate some tasks that have some dependencies.

If you run the program now, then you'll see something like this:

```
anik@DESKTOP-IE3PQ9M:/mnt/d/My courses/IPC Online$ gcc -pthread test1.c
anik@DESKTOP-IE3PQ9M:/mnt/d/My courses/IPC Online$ ./a.out
Task 0 is starting...
Task 1 is starting...
Task 2 is starting...
Task 3 is starting...
Task 4 is starting...
Task 6 is completed.
Task 7 is completed.
Task 8 is completed.
Task 9 is completed.
Task 1 is completed.
Task 4 is completed.
Task 5 is completed.
Task 6 is completed.
Task 7 is completed.
Task 8 is completed.
Task 9 is completed.
```

Where the dependencies are not ensured. You have to ensure the dependencies among the tasks.

When you complete the function correctly, and run the program, your output should look like this.

```
anik@DESKTOP-IE3PQ9M:/mnt/d/My courses/IPC Online$ gcc -pthread test1.c
anik@DESKTOP-IE3PQ9M:/mnt/d/My courses/IPC Online$ ./a.out
Task 0 is starting...
Task 0 is completed.
Task 1 is starting...
Task 1 is completed.
Task 2 is starting...
Task 3 is starting...
Task 4 is completed.
Task 4 is completed.
Task 4 is completed.
All tasks completed.
```