Assignment 2

Description:

Program takes an input that contain random numbers and by multi-threading checks if the numbers are Prime or Even.

Compilation:

Program uses the math.h library and the pthread.h library so the linker of the compiler (gcc) needs specific arguments to compile.

- -lpthread for pthread.h
- -lm for math.h

So the command needed to compile program is :

gcc -Wall -g name_of_file.c -o name_of_exec -lpthread -lm

In our program:

gcc -Wall -g primes.c -o primes -lpthread -lm

Test Cases:

To test the program we are using the following files :

Random Numbers:

- random_50.txt
- random_100.txt

Only Prime Numbers:

- hi_200.txt
- low_200.txt
- low_1000.txt

Execution:

The executable file takes as Arguments the number of Threads that should be used and the Test File we are checking.

So the command to execute the program is :

./primes <number_of_threads> <test_file