CSE4034 Advanced Unix Programming - Assignment #2

Due To: 2.06.2019

Implementation of Prime Numbers Using OpenMP

In this assignment, you are going to implement a program that takes a number "n" as input and calculates all the prime numbers less than n. You will write all the prime numbers and the thread that finds this prime number to both the screen and an output file.

In the implementation, you will use an array or stack that holds the prime numbers, and each thread will take a number and try to decide whether the number is prime or not by dividing it to the prime numbers in the list. You should use at least 3 at most 5 threads in your implementation.

You are required to use OpenMP for the implementation.

Sample Run:

Enter n: 50

Thread 1 Prime 2

Thread 2 Prime 3

Thread 3 Prime 5

……

Thread 5 Prime 43

Thread 2 Prime 47

What to submit?

A softcopy of your *source codes* which are extensively commented and appropriately structured and a report that shows the screenshots of your program for different values of input number n and the number of threads used.

You can work in groups of two or three. Late submissions will not be accepted. You can submit your assignment to **cse4034.projects@gmail.com**