INFSCI 2500

Homework 1

The assignment is to write a java program which computes all prime numbers from 2 to n where n starts at 10,000 and goes to 100,000 in steps of 10,000. At the end of each step, print out the step the program is on, the number of primes found, and the time it took to complete the step.

You can use System.nanoTime() to get billionths of a second. The actual values for the time taken at each step will depend on the computer you are using.

Afterwards, use Excel to create a line plot of the number of primes found and time taken for each step, such as the one seen below.

Submit the following:

1. The java source file(s).
2. A pdf readme file which includes the output you got from your program and the plot.

Zip all files and name it “HW1\_Your\_Name”. Then submit it on Canvas.

Grading:

5 points: Submitting the source file and pdf with output and plot.

5 points: The source file compiles, runs, and produces meaningful output without errors.

This assignment is due September 12 at 6 PM. Late submissions will not be accepted!