LAB2 Report

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September 2018

1 Introduction

The TestProg class is the one with the main function. First it checks if the command line argument is passed.

This command line argument needs to be the path to the file containing the test X value cases, this X values need to be integers (or long) written line after line in the passed file. This is done to stream-line the process of testing multiple cases.

Then the ListOfPrimes class is the one that performs the sieve of Eratosthenes algorithm to fine the prime numbers up to the given X value of each line in the input file passed on the command line.

Now for each of the test cases (X) a list of the prime numbers are written to a text file with then name X. The prime numbers are stored in this files for each line of the input. These files are written into the the output directory.

2 Modifications to the way parameters are passed

We decided to pass our parameters as a file with a list of values that the user wants to test with. So if the user would like to test one or more values then the user would enter those values in a text file and when calling the TestProg, the user will add the text file path as an argument.

3 Predicted test cases

Tested cases were for values: 10, 100, 1000, 10 000, 100 000, 1 000 000 and 10 000 000. For results, please go to the link

https://github.com/cgmoganedi/Eratosthenes/tree/master/src/outputs.

4 Input and Output files

Input and Output files are at the link

https://github.com/cgmoganedi/Eratosthenes/tree/master/src/.