
Surprise assignment for lab 2 #1

Student's name 1 _____ Student's name 2 _____

Task

Modify your solution from Assignment 3 so that it computes and prints out the mean value of all prime numbers between a 1 and N, where N is the parameter to your new `mean_sieves` function.

Surprise assignment for lab 2 #2

Student's name 1 _____ Student's name 2 _____

Task

Modify your solution from Assignment 3 so that it computes and prints out the average distance value between prime numbers. For instance, the distance between 2 and 3 is 1; the distance between 7 and 11 is 4.

Surprise assignment for lab 2 #3

Student's name 1 _____ Student's name 2 _____

Task

Modify your solution from Assignment 3 so that it computes and prints out the n:th prime number. For instance, `nth_sieves(4)` should print out “7”, because in the prime list 2,3,5,7,11, the 4th prime number is 7. Make sure that it works for the 1000th prime.

Surprise assignment for lab 2 #4

Student's name 1 _____

Student's name 2 _____

Task

Modify your solution from Assignment 3 so that it computes and prints out the number of times there is a distance of 8 between two prime numbers. If we assume that X and Y are two prime numbers that comes directly after each other, and $Y > X$, then the distance between them is $Y - X$. Your function should look at all numbers under N and then count the number of distances that are 8.

Surprise assignment for lab 2 #5

Student's name 1 _____

Student's name 2 _____

Task

Modify your solution from Assignment 3 so that it computes and prints out the number of times there is a distance of 4 between two prime numbers. If we assume that X and Y are two prime numbers that comes directly after each other, and $Y > X$, then the distance between them is $Y - X$. Your function should look at all numbers under N and then count the number of distances that are 4.