

CL1002 – Programming Fundamentals Lab

Quiz # 01

Note:

- An individual may be assigned a straight-forward 0 if the submitted assessed task is copied/cheated from another individual/internet.
- Comments your code properly.
- Create a folder named as Roll number, name and section i.e (21P-8721_Zain_9A), copy all the files (Q1.c,Q2.c), in that folder and submit the folder.

Problem: 1

Write a program to declare an array of size 9, initialize the array with the user provided values (using scanf) and Count the elements of array that are prime numbers.

Problem: 2 | Enforcing Privacy with Cryptography (Encryption)

The explosive growth of Internet communications and data storage on Internet-connected computers has greatly increased privacy concerns. The field of cryptography is concerned with coding data to make it difficult (and hopefully—with the most advanced schemes—impossible) for unauthorized users to read. In this exercise you'll investigate a simple scheme for encrypting and decrypting data. A company that wants to send data over the Internet has asked you to write a program that will encrypt it so that it may be transmitted more securely. All the data is transmitted as four-digit integers. Your application should read a four-digit integer entered by the user and encrypt it as follows: Replace each digit with the result of adding 7 to the digit and getting the remainder after dividing the new value by 10. Then swap the first digit with the third and swap the second digit with the fourth. Then print the encrypted integer.