



CL2001 – Data Structure Lab

Exercise # 02

Note:

- Plagiarism will not be **tolerated!!**
- Variable name should be meaning ful.
- Use comments wherever applicable.
- Note that these lab task marks could be graded through a viva in lab.
- Submit a pdf file containing all of your C++ code with all possible screenshots of every task outputs on Google Classroom. The name of file should be your roll no followed by your name (roll-no-name.pdf) i.e (22P-8743-Zain.pdf).

Problem: 1

Write a program that dynamically allocates an array of size N entered by the user.

Store random integers in the array entered by the user.

Now Perform the task mentioned below:

1. Find the mean (average).
2. Display the whole array in reverse order.
3. Count the elements of array that are prime numbers.
4. Create a method secondMax that will find and return the second maximum in this array.
5. Create a method sort that will sort the array in descending order.
6. Call a method named findMode that will find and print, appropriately labeled, the number that occurs most often. If there are ties, print only 1.

Note: Use pointer notation instead of array indexes.

Problem: 2

Write a function that accepts following arguments; A pointer char array and Two integer that indicates the indexes (startIndex and stopIndex). Function will print the string which holds the section between the two indexes.

Example:

Entered string is “My name is ali”

Start index: 3

Stop index: 6

Function will return “name”