**Tutorial 1 (Array and Strings)**

**Instructions**

1. All tutorial sheets will be posted on the Google Classroom.

2. Students are advised to submit tutorial sheets solutions in classroom.

1. Write a C++ program to find the smallest element missing in a sorted array.

Original array: 0 1 3 4 5 6 7 8 10

Smallest missing element is 2

1. Write a C++ program to count the number of occurrences of given number in a sorted array of integers.

Original array: 5 7 8 8 5 8 7 7

Number of occurrences of 7 : 3

1. Write a C++ program to find the repeating elements in a given array of integers.

Original array: 1 2 3 5 5 7 8 8 9 9 2

Repeating elements: 2 5 8 9

1. Write a C++ program to find and print all unique elements of a given array of integers.

Original array: 1 5 7 5 8 9 11 11 2 5 6

Unique elements of the said array: 1 5 7 8 9 11 2 6

1. Write a C++ program to reverse a given string.

Original string: Python

Reverse string: nohtyP

1. Write a C++ program to change every letter in a given string with the letter following it in the alphabet (ie. a becomes b, p becomes q, z becomes a).

Original string: Python

New string: Qzuipo

1. Write a C++ program to find the largest word in a given string.

Original String: C++ is a general-purpose programming language.

Longest word: programming