**ASSIGNMENT NO : 1**

**Title:**

To write a C++ program to store marks secured for a test by N students and compute various results of student.

**Problem Statement:**

Write a C++ program to store marks secured for first test of subject data structure and algorithm for N students compute.

1)The average score of class

2)The highest and low score of Class

3)Marks scored by most of the student.

4)List of student who were absent for test.

**Objectives:**

To study concept of array and their types

2)To extract and insert data into array.

3)To perform various operations on elements of array.

**Outcomes:**

1)To design algorithm to solve programming problem.

2)To use effectively and efficiently the concept of array in solving various domain problems.

**Theory:**

Array: an array is a continuous block of Data used for storing a collection of homogeneous data items accessed by a common name.

Types of array:

1)One-dimensional array.

**Algorithm:**

Steps:

1)Start

2)Accept number of student from user and create a 2D array.

3)Read roll number and marks [-1 if absent].

4)Display option

1)Average

2)Highest and lowest

3)Marks obtained

4)List of absent student

5)Scan choice from user.

6)Perform desired function according to choose.

7)Show result.

8)Ask whether user want to continue.

9)Stop.

**Flowchart:**

Start

Accept number of student from user.

IS ch==y?

Average

STOP

A

Accept roll no and marks of each student

Display menu:

1)Average

2)Highest and Lowest

3)Absent student

5)Display all marks

Scan choice from user

D

C

B

Display

Absent

Highest

IS ch==4?

IS ch=3?

IS ch==2?

IS ch==1?

A