

### Introduction to C++ for DSA

#### **Module 7.5: Practice Day 02**

(Codeforces Links & Practice Questions)

#### **Topics:**

- 1. Array of Objects
- 2. Random questions

#### **Codeforces Links:**

- 1. G. Even Hate Odd
- 2. H. N Times
- 3. <u>F. Equation</u>

### **Practice Problem 1**

**Question:** Make a class named **Student**. Write a program to take a positive integer **N** as input and make an Student array of size N.

```
Student
{
    name;
    roll;
    marks;
}
```

Your task is to sort the Students data according to the marks in descending order. If multiple students have the same marks then sort them according to the roll in ascending order as the roll will be unique.

**Note**: name will not contain any spaces.

Sample Input	Sample Output
5 Asif 29 95 Sakib 55 89 Zubair 57 93 Ahsan 39 86 Joy 12 99	Joy 12 99 Asif 29 95 Zubair 57 93 Sakib 55 89 Ahsan 39 86
5 Asif 29 95 Sakib 55 86 Zubair 57 86 Ahsan 39 86 Joy 12 99	Joy 12 99 Asif 29 95 Ahsan 39 86 Sakib 55 86 Zubair 57 86

## Practice Problem 2

**Question:** Make a class named **Student**. Write a program to take a positive integer **N** as input and make an Student array of size N.

```
Student
{
    name;
    roll;
    marks;
}
```

Your task is to reverse the array and print the array of Student.

Note: name will not contain any spaces.

Sample Input	Sample Output
5 Asif 29 95 Sakib 55 89 Zubair 57 93 Ahsan 39 86 Joy 12 99	Joy 12 99 Ahsan 39 86 Zubair 57 93 Sakib 55 89 Asif 29 95

# Practice Problem 3

**Question:** Take a sentence S as input and then take another string word X as input. Then count how many times the word X appeared in the sentence. The words in the sentence are separated by spaces.

Sample Input	Sample Output
Sanju Samson shamanta samson jessica Bhatta Asif John takla john abraham john baby Shark tank john	2