

**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](https://codeforces.com/group/MWSDmqGsZm/contest/329103/problem/G)
2. [H. N Times](https://codeforces.com/group/MWSDmqGsZm/contest/223205/problem/H)
3. [F. Equation](https://codeforces.com/group/MWSDmqGsZm/contest/223205/problem/F)

**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 |

**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 |

**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 |