

1. Design a structure student\_record to contain name, roll\_number, and total marks obtained. Write a program to read 10 students data from the use and then display the first three toppers on the screen

**Code:**

```
#include <stdio.h>

struct student_record {
    char name[20];
    int roll_number;
    int total_marks;
};

int main() {
    int len;
    printf("Enter the number of students: ");
    scanf("%d", &len);
    struct student_record record[len];

    for (int i = 0; i < len; i++) {
        printf("Student no: %d\n", i+1);
        printf("Enter student name: ");
        scanf("%s", &record[i].name);
        printf("Enter roll number: ");
        scanf("%d", &record[i].roll_number);
        printf("Enter total marks: ");
        scanf("%d", &record[i].total_marks);
        printf("\n");
    }

    for (int a = 0; a < len-1; a++) {
        for (int b = 0; b < len-1-a; b++) {
            if (record[b].total_marks < record[b+1].total_marks) {
                struct student_record temp = record[b];
                record[b] = record[b+1];
                record[b+1] = temp;
            }
        }
    }

    for (int z = 0; z < 3; z++) {
        printf("Name: %s\nRollno: %d\nMarks: %d\n\n", record[z].name,
        record[z].roll_number, record[z].total_marks);
    }

    return 0;
}
```

## Output:

```
PS C:\Users\Ajay kumar\Desktop\SEIT\DSA\Lab\0 - Structure implementation using C programming> gcc main.c -o main
SA\Lab\0 - Structure implementation using C programming\" ; if ($?) { gcc main.c -o main
Enter the number of students: 10
Student no: 1
Enter student name: Stash
Enter roll number: 1
Enter total marks: 47

Student no: 2
Enter student name: Ezekiel
Enter roll number: 2
Enter total marks: 38

Student no: 3
Enter student name: Semira
Enter roll number: 3
Enter total marks: 56

Student no: 4
Enter student name: Vishal
Enter roll number: 4
Enter total marks: 74

Student no: 5
Enter student name: Shubham
Enter roll number: 5
Enter total marks: 75

Student no: 6
Enter student name: Nikita
Enter roll number: 6
Enter total marks: 53

Student no: 7
Enter student name: Lincia
Enter roll number: 7
Enter total marks: 67

Student no: 8
Enter student name: Mokshada
Enter roll number: 8
Enter total marks: 74

Student no: 9
Enter student name: Bhargav
Enter roll number: 9
Enter total marks: 73

Student no: 10
Enter student name: Ryan
Enter roll number: 10
Enter total marks: 99

Name: Ryan
Rollno: 10
Marks: 99

Name: Shubham
Rollno: 5
Marks: 75

Name: Vishal
Rollno: 4
Marks: 74

PS C:\Users\Ajay kumar\Desktop\SEIT\DSA\Lab\0 - Structure implementation using C programming> |
```