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1  /*
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6  Task 1
7  Module 4 : Structures
8  Aim: Design a structure student record to contain
9  name, roll number, and total marks obtained. Write a
10 program to read 5 students data from the user and then
11 display the topper on the screen
12 */
13 #include <stdio.h>
14 #include <string.h>
15 // Defining the structure to hold student data
16 struct student_record {
17     char name[50];
18     int roll number;
19     float total marks;
20 };
21 // Function to read student data
22 void input_student_data(struct student_record students[], int n) {
23     for (int i = 0; i < n; i++) {
24         printf("Enter details for student %d:\n", i + 1);
25         printf("Name: ");
26         getchar(); // To consume the newline left by the previous input
27         gets(students[i].name);
28         printf("Roll Number: ");
29         scanf("%d", &students[i].roll number);
30         printf("Total Marks: ");
31         scanf("%f", &students[i].total marks);
32     }
33 }
34 // Function to find and return the index of the student with the highest marks
35 int find_topper(struct student_record students[], int n) {
36     int topper_index = 0;
37     for (int i = 1; i < n; i++) {
38         if (students[i].total marks > students[topper_index].total marks) {
39             topper_index = i;
40         }
41     }
42     return topper_index;
43 }
44 int main() {
45     int n = 5; // Number of students
46     struct student_record students[n];
47     printf("\n\t\t *** Topper Finder *** \n\n");
48     // Input student data
49     input_student_data(students, n);
50     // Find the topper
51     int topper_index = find_topper(students, n);
52     // Display topper Details
53     printf("\nTopper Details:\n");
54     printf("Name: %s\n", students[topper_index].name);
55     printf("Roll Number: %d\n", students[topper_index].roll number);
56     printf("Total Marks: %.2f\n", students[topper_index].total marks);
57     return 0;
58 }
59
60

```