**LAB EXERCISES**

**EX.NO:09**

**USING STRUCTURES**

**AIM:**

**To write a C program to collect and print students details like name, marks, etc. and then to calculate total and average mark using structure.**

**PROCEDURE:**

1. **Start the program.**
2. **Define a structure Student with the following members:**
   * **name → to store student's name (character array)**
   * **roll no → to store roll number (integer)**
   * **marks[5] → to store marks of 5 subjects (array of integers)**
   * **total → to store total marks (integer)**
   * **average → to store average marks (float)**
3. **Declare a variable of type struct Student, e.g., s.**
4. **Get the student's details from the user:**
   * **Input name**
   * **Input roll no**
   * **Input marks for 5 subjects and store in s. marks[ i ] using a loop**
5. **Initialize total = 0.**
6. **Calculate total marks:**
   * **Loop through all 5 subjects**
   * **Add each mark to s. total**
7. **Calculate average:**
   * **s. average = s. total / 5.0**
8. **Display the student details:**
   * **Name, roll number**
   * **Marks in each subject**
   * **Total and average**
9. **End the program.**

**PROGRAM:**

**#include <stdio.h>**

**#include <conio.h>**

**struct student {**

**int regno;**

**char name[20];**

**int mark[6];**

**int total;**

**float aver;**

**};**

**void main() {**

**struct student s[70];**

**int n, i, j;**

**clrscr();**

**printf("\nEnter the number of students\n");**

**scanf("%d", &n);**

**for (i = 0; i < n; i++) {**

**printf("\nEnter the register number, name, and six marks one by one:\n");**

**scanf("%d %s", &s[i].regno, s[i].name);**

**s[i].total = 0;**

**for (j = 0; j < 6; j++) {**

**scanf("%d", &s[i].mark[j]);**

**s[i].total += s[i].mark[j];**

**}**

**s[i].aver = s[i].total / 6.0;**

**printf("\nTotal mark and average mark are:\n");**

**printf("%d\t%s\t%d\t%8.2f\n", s[i].regno, s[i].name, s[i].total, s[i].aver);**

**}**

**getch();**

**}**

**RESULT:**

**Thus the above C program is executed and the output is obtained.**