```
/* Define a structure called Student with the members: Name, Reg_no, marks in 3 tests and a
Develop a menu driven program to perform the following by writing separate function for eac
a) read information of N students
b) display student’s information
c) to calculate the average of best two test marks of each student.
Note: Allocate memory dynamically and illustrate the use of pointer to an array of structur

#include<stdio.h>
#include <stdlib.h>
#include <string.h>

typedef struct
{
char Name[20];
int Reg_no;
float marks[3];
float average_marks;
} Student;

void Read(Student *, int);
void Display(Student *, int);
void Average(Student *, int);
void Menu();

int main()
{
Student *students = NULL;
int n = 0, choice;

while (1)
{
Menu();
scanf("%d", &choice);

switch (choice)
{
case 1:
printf("\nEnter number of students: ");
scanf("%d", &n);
students = (Student *)malloc(n * sizeof(Student));
if (students == NULL)
{
printf("Memory allocation failed.\n");
exit(1);
}
Read(students, n);
break;

case 2: Display(students, n);
break;

case 3: Average(students, n);
break;

case 4:
printf("\nExiting program.\n");
free(students);
exit(0);
default: printf("\nInvalid choice. Please try again.\n");
}
}
```

```
return 0;
}

void Read(Student *s, int n)
{
for (int i = 0; i < n; i++)
{
printf("\nEnter details for Student %d:\n", i + 1);

printf("Name: ");
scanf("%s", (s + i)->Name);

printf("Registration Number: ");
scanf("%d", &(s + i)->Reg_no);

printf("Enter marks for 3 tests:\n");
for (int j = 0; j < 3; j++)
{
printf("Mark %d: ", j + 1);
scanf("%f", &((s + i)->marks[j]));
}
(s + i)->average_marks = 0;
}
}

void Display(Student *s, int n)
{
printf("\n%-20s %-10s %-10s %-10s %-10s %-15s\n","Name", "Reg_no", "Test1", "Test2", "Test3
printf("---------------------------------------------------------------------------------\n

for (int i = 0; i < n; i++)
printf("%-20s %-10d %-10.2f %-10.2f %-10.2f %-15.2f\n", (s + i)->Name, (s + i)->Reg_no, (s
(s + i)->marks[2], (s + i)->average_marks);
}

void Average(Student *s, int n)
{
for (int i = 0; i < n; i++)
{
float m1 = (s + i)->marks[0];
float m2 = (s + i)->marks[1];
float m3 = (s + i)->marks[2];

float min = m1;
if (m2 < min) min = m2;
if (m3 < min) min = m3;

float avg = (m1 + m2 + m3 - min) / 2.0;
(s + i)->average_marks = avg;
}
}

void Menu()
{
printf("\n==== Student Details Menu ====\n");
printf("1. Read student information\n");
printf("2. Display student information\n");
printf("3. Calculate average of best 2 test marks\n");
printf("4. Exit\n");
printf("Enter your choice: ");
}
```