1.Program to take employee, his/her name, age, and salary using structure.

Program:

```c
#include <stdio.h>
#include<string.h>
struct employee
{
    char name[50];
    int age;
    float salary;
};
int main()
{
    struct employee obj;
    printf("Enter the employee name: ");
    gets(obj.name);
    printf("Enter the employee age: ");
    scanf("%d",&obj.age);
    printf("Enter the employee salary: ");
    scanf("%f",&obj.salary);
    printf("\n\n\nThe name of the employee is %s. Age is %d. Salary is %f.",obj.name,obj.age,obj.salary);
    return 0;
}
```

OUTPUT:

```
Enter the employee name: abc
Enter the employee age: 18
Enter the employee salary: 6754



The name of the employee is abc. Age is 18. Salary is 6754.000000.

...Program finished with exit code 0
Press ENTER to exit console.
```
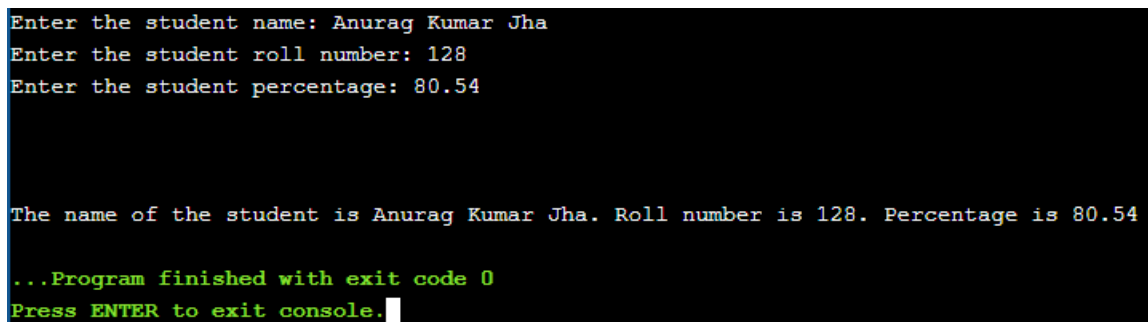
2.Write C program to read and print the student details using structure and Static Memory Allocation.(Name, roll, Perc)

Program:

```c
#include <stdio.h>
#include<string.h>
struct student
{
    char name[50];
    int roll;
    float percentage;
};
int main()
{
    struct student obj;
    printf("Enter the student name: ");
    gets(obj.name);
    printf("Enter the student roll number: ");
    scanf("%d",&obj.roll);
```

```
    printf("Enter the student percentage: ");

    scanf("%f",&obj.percentage);

    printf("\n\n\nThe name of the student is %s. Roll number is %d. Percentage is
%0.2f%",obj.name,obj.roll,obj.percentage);

    return 0;

}
```

OUTPUT:

```
Enter the student name: Anurag Kumar Jha
Enter the student roll number: 128
Enter the student percentage: 80.54



The name of the student is Anurag Kumar Jha. Roll number is 128. Percentage is 80.54

...Program finished with exit code 0
Press ENTER to exit console.
```

3.Write C program to read and print the 3 student details using array of structures (Name, roll, Perc)

Program:

```
#include <stdio.h>
#include<string.h>
struct student
{
    char name[50];
    int roll;
    float percentage;
```

```
};
int main()
{
    struct student obj;
    printf("Enter the student name: ");
    gets(obj.name);
    printf("Enter the student roll number: ");
    scanf("%d",&obj.roll);
    printf("Enter the student percentage: ");
    scanf("%f",&obj.percentage);
    printf("\n\n\nThe name of the student is %s. Roll number is %d. Percentage is
%0.2f%",obj.name,obj.roll,obj.percentage);
    return 0;
}
```

OUTPUT:

```
Enter details for student number 1:
Enter the student name: abc
Enter the student roll number: 56
Enter the student percentage: 12.35


Enter details for student number 2:
Enter the student name: bhj
Enter the student roll number: 78
Enter the student percentage: 56.25


Enter details for student number 3:
Enter the student name: kjh
Enter the student roll number: 789
Enter the student percentage: 56


Detalis for student 1
The name of the student is bc. Roll number is 56. Percentage is 12.35

Detalis for student 2
The name of the student is bhj. Roll number is 78. Percentage is 56.25

Detalis for student 3
The name of the student is kjh. Roll number is 789. Percentage is 56.00

...Program finished with exit code 0
Press ENTER to exit console.
```

4. Write C program to read and print employee, his/her name, age, and salary using pointer to the structures.

Program:

```c
#include <stdio.h>
#include<string.h>
struct student
{
    char name[50];
    int roll;
    float percentage;
};
int main()
{
    struct student abc;
    struct student *obj;
    obj=&abc;
    printf("Enter the student name: ");
    gets(obj->name);
    printf("Enter the student roll number: ");
    scanf("%d",&obj->roll);
    printf("Enter the student percentage: ");
    scanf("%f",&obj->percentage);
    printf("\n\n\nThe name of the student is %s. Roll number is %d. Percentage is %0.2f%",obj->name,obj->roll,obj->percentage);
    return 0;
```

}

OUTPUT:

```
Enter the student name: abv
Enter the student roll number: 87
Enter the student percentage: 12.54



The name of the student is abv. Roll number is 87. Percentage is 12.54

...Program finished with exit code 0
Press ENTER to exit console.
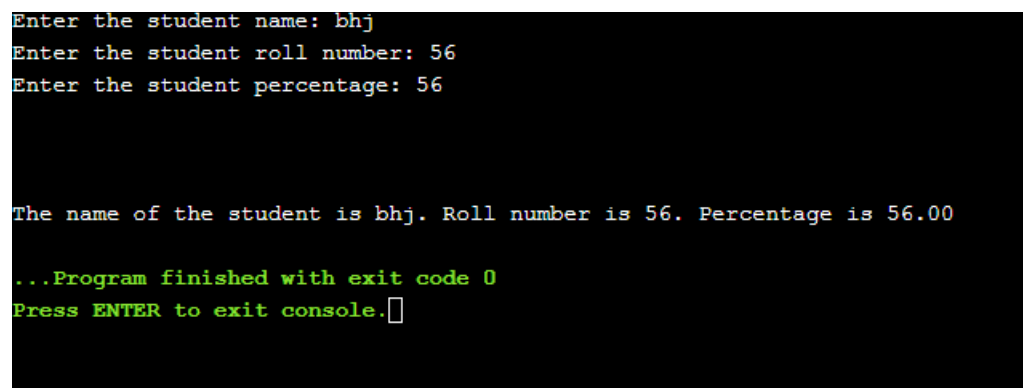```


**5. Write C program to read and print the student details using structure and Dynamic Memory Allocation.( Name, roll, Perc)**


Program:


```c
#include <stdio.h>

#include<string.h>

#include<stdlib.h>

typedef struct

{

    char name[50];

    int roll;

    float percentage;

}student;

int main()

{

    student *obj=(student *) malloc(sizeof(student));

    printf("Enter the student name: ");
```

```
    gets(obj->name);

    printf("Enter the student roll number: ");

    scanf("%d",&obj->roll);

    printf("Enter the student percentage: ");

    scanf("%f",&obj->percentage);

    printf("\n\n\nThe name of the student is %s. Roll number is %d. Percentage is
%0.2f%",obj->name,obj->roll,obj->percentage);

    return 0;

}
```

OUTPUT:

```
Enter the student name: bhj
Enter the student roll number: 56
Enter the student percentage: 56




The name of the student is bhj. Roll number is 56. Percentage is 56.00

...Program finished with exit code 0
Press ENTER to exit console.
```

**6. Write C program to read and print the N student details using structure
and Dynamic Memory Allocation. (Name, roll, Perc)**

Program:

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

```c
typedef struct
{
    char name[50];
    int roll;
    float percentage;
}student;
int main()
{
    int n;
    printf("Enter the number of students: ");
    scanf("%d",&n);
    student *obj=(student *) malloc(n*sizeof(student));
    for(int i=1;i<=n;i++)
    {
        printf("\n\nEnter details for student number %d:\n",i);
        printf("Enter the student name: ");
        getchar();
        gets(obj[i-1].name);
        printf("Enter the student roll number: ");
        scanf("%d",&obj[i-1].roll);
        printf("Enter the student percentage: ");
        scanf("%f",&obj[i-1].percentage);
    }
    for(int i=1;i<=n;i++)
    {
        printf("\n\nDetalis for student %d",i);
        printf("\nThe name of the student is %s. Roll number is %d. Percentage is
%0.2f%",obj[i-1].name,obj[i-1].roll,obj[i-1].percentage);
```

```
    }
    return 0;
}
```

OUTPUT:

```
Enter the number of students: 4


Enter details for student number 1:
Enter the student name: abc
Enter the student roll number: 1
Enter the student percentage: 60


Enter details for student number 2:
Enter the student name: def
Enter the student roll number: 2
Enter the student percentage: 65


Enter details for student number 3:
Enter the student name: ghi
Enter the student roll number: 3
Enter the student percentage: 70


Enter details for student number 4:
Enter the student name: jkl
Enter the student roll number: 4
Enter the student percentage: 75


Detalis for student 1
The name of the student is abc. Roll number is 1. Percentage is 60.00

Detalis for student 2
The name of the student is def. Roll number is 2. Percentage is 65.00

Detalis for student 3
The name of the student is ghi. Roll number is 3. Percentage is 70.00

Detalis for student 4
The name of the student is jkl. Roll number is 4. Percentage is 75.00

...Program finished with exit code 0
Press ENTER to exit console.
```