TUT 7

Q1

```c
#include<stdio.h>
struct details{
    char name[30];
    int number;
    float CGPI;
};
int main(){
    printf("Aaryan Sharma\n");
    printf("16010123012\n");
    struct details s1={"Aaryan",12,8.5};
    printf("Name : %s\n",s1.name);
    printf("Roll number : %d \n",s1.number);
    printf("CGPI : %f\n",s1.CGPI);
    struct details s2;
    printf("\nName : ");
    scanf("%s",s2.name);
    printf("Roll number : ");
    scanf("%d",&s2.number);
    printf("CGPI : ");
    scanf("%f",&s2.CGPI);
    printf("\nStudent Details");
    printf("\nName : %s",s2.name);
    printf("\nRoll number : %d ",s2.number);
    printf("\nCGPI : %f",s2.CGPI);
    return 0;
}
```

Output

```
Aaryan Sharma
16010123012
Name : Aaryan
Roll number : 12
CGPI : 8.500000

Name : aar
Roll number : 87
CGPI : 4.97

Student Details
Name : aar
Roll number : 87
CGPI : 4.970000
Process returned 0 (0x0)   execution time : 9.352 s
```

```
Aaryan Sharma
16010123012
Name : Aaryan
Roll number : 12
CGPI : 8.500000

Name : sdfs
Roll number : 87654
CGPI : 3.5426

Student Details
Name : sdfs
Roll number : 87654
CGPI : 3.542600
Process returned 0 (0x0)   execution time : 9.437 s
```

```
Aaryan Sharma
16010123012
Name : Aaryan
Roll number : 12
CGPI : 8.500000

Name : riya
Roll number : 01
CGPI : 9.9

Student Details
Name : riya
Roll number : 1
CGPI : 9.900000
Process returned 0 (0x0)   execution time : 7.808 s
```

Q2

```c
#include<stdio.h>
struct details{
    char name[30];
    int ID;
    float Exp;
};
int main(){
    printf("Aaryan Sharma\n");
    printf("16010123012\n");
    struct details e1={"Jay",10012,2.3};
    printf("Name : %s\n",e1.name);
    printf("ID : %d \n",e1.ID);
    printf("Years of experience : %f\n",e1.Exp);

    struct details e2;
    printf("\nName : ");
    scanf("%s",e2.name);
    printf("ID : ");
    scanf("%d",&e1.ID);
    printf("Years of experience : ");
    scanf("%f",&e2.Exp);
    printf("\nEmployee Details");
    printf("\nName : %s",e2.name);
    printf("\nID : %d ",e2.ID);
    printf("\nYears of experience : %f",e2.Exp);
    return 0;
}
```

Output

```
Aaryan Sharma
16010123012
Name : Jay
ID : 10012
Years of experience : 2.300000

Name : raj
ID : 10023
Years of experience : 4.5

Employee Details
Name : raj
ID : 0
Years of experience : 4.500000
Process returned 0 (0x0)   execution time : 11.387 s
```
```
Aaryan Sharma
16010123012
Name : Jay
ID : 10012
Years of experience : 2.300000

Name : riya
ID : 20031
Years of experience : 6.8

Employee Details
Name : riya
ID : 0
Years of experience : 6.800000
Process returned 0 (0x0)   execution time : 10.269 s
```

Q3

```c
#include<stdio.h>

struct car{

char name[30];

int num;

};

int cars(struct car arr_car[],int n){

    int i;

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

```c
        printf("Car Name %d:",i+1);

        scanf("%s",&arr_car[i].name);

        printf("Car number %d:",i+1);

        scanf("%d",&arr_car[i].num);

    }

}

int display(struct car arr_car[],int n){

    int i;

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

        printf("\n %s %d",arr_car[i].name,arr_car[i].num);

    }

}

int main(){

    printf("Aaryan Sharma\n");

    printf("16010123012\n");

    int x;

    printf("Enter value for x : ");

    scanf("%d",&x);

    struct car arr_car[x];

    cars(arr_car,x);

    display(arr_car,x);

    return 0;

}
```

Output

```
Aaryan Sharma
16010123012
Enter value for x : 5
Car Name 1:Rr
Car number 1:23
Car Name 2:lambo
Car number 2:38
Car Name 3:volo
Car number 3:12
Car Name 4:nano
Car number 4:2
Car Name 5:ferrari
Car number 5:9


 Rr 23
 lambo 38
 volo 12
 nano 2
 ferrari 9
Process returned 0 (0x0)   execution time : 36.455 s
Press any key to continue.
```