Assignment 13

In void main

1. //Student (rollNo, name, marks)

```c
#include <stdio.h>
struct Student{
        int rollNo;
        char name[15];
        double marks;
};
int main()
{
        struct Student arr[3];
        int i;
        for(i=0; i<3; i++){
                printf("Enter your roll no. ");
                scanf("%d", &arr[i].rollNo);
                printf("Enter your name: ");
                scanf("%s", &arr[i].name);
                printf("Enter your marks ");
                scanf("%lf", &arr[i].marks);
        }
        for(i=0; i<3; i++){
                printf("Roll No is : %d\n", arr[i].rollNo);
                printf("Name is : %s\n", arr[i].name);
                printf("Marks are : %lf\n", arr[i].marks);
        }
}
```

2. //Employee (id, name, salary)

```c
#include<stdio.h>
struct Employee{
        int id;
        char name[30];
        double salary;
};
int main()
{
        struct Employee emp;
        printf("Enter your id: ");
        scanf("%d", &emp.id);
        printf("Enter your name: ");
        scanf("%s", &emp.name);
        printf("Enter your salary: ");
        scanf("%d", &emp.salary);
```

```c
        printf("Id = %d\n", emp.id);
        printf("Name = %s\n", emp.name);
        printf("Salary = %lf", emp.salary);
}
```

3. //Admin (id, name, salary, allowance)

```c
#include<stdio.h>
struct Admin{
        int id;
        char name[30];
        double salary;
        float allowance;
};
int main()
{
        struct Admin a;
        a.id = 84;
        strcpy(a.name,"Sita");
        a.salary = 90000;
        a.allowance = 0.15;

        printf("Id = %d\n", a.id);
        printf("Name = %s\n", a.name);
        printf("Salary = %lf\n", a.salary);
        printf("Allowance in percentage = %f", a.allowance);
}
```

4. //HR (id, name, salary, commission)

```c
#include<stdio.h>
struct HR{
        int id;
        char name[30];
        double salary;
        float comission;
};
int main()
{
        struct HR a;
        a.id = 84;
        strcpy(a.name,"Sita");
        a.salary = 90000;
        a.comission = 0.10;

        printf("Id = %d\n", a.id);
        printf("Name = %s\n", a.name);
        printf("Salary = %lf\n", a.salary);
```

```c
        printf("Allowance in percentage = %f", a.comission);
}
    5. //SalesManager (id, name, salary, incentive, target)
//HR (id, name, salary, commission)
#include<stdio.h>
#include<string.h>
struct SalesManager{
        int id;
        char name[30];
        double salary;
        float incentive;
        double target;
};
int main()
{
        struct SalesManager salesManager;
        salesManager.id = 84;
        strcpy(salesManager.name,"Sita");
        salesManager.salary = 90000;
        salesManager.incentive = 0.5;
        salesManager.target = 10000000;

        printf("Id = %d\n", salesManager.id);
        printf("Name = %s\n", salesManager.name);
        printf("Salary = %lf\n", salesManager.salary);
        printf("Incentive in percentage = %f\n", salesManager.incentive);
        printf("Target is = %lf", salesManager.target);
}
    6. //Date (date, month, year)
#include<stdio.h>
struct Day{
        int date;
        int month;
        int year;
};
int main()
{
        struct Day d;
        d.date = 10;
        d.month = 03;
        d.year = 2025;

        printf("Day is %d-%d-%d", d.date, d.month, d.year);
```

```c
}
```

7. //Time (hour, min, sec)

```c
#include<stdio.h>
struct Time{
        int hour;
        int min;
        int sec;
};
int main()
{
        struct Time t;
        t.hour = 5;
        t.min = 11;
        t.sec = 40;

        printf("Time is %d hours %d min %d sec", t.hour, t.min, t.sec);

}
```

8. //Distance (feet, inch)

```c
#include<stdio.h>
struct Distance{
        int feet;
        int inch;
};
int main()
{
        struct Distance dis;
        dis.feet = 5;
        dis.inch = 4;

        printf("Distance is %d feet and %d inches", dis.feet, dis.inch);

}
```

9. //Complex (real, imaginary)

```c
#include<stdio.h>
struct Complex{
        int real;
        char imaginary[];
};
int main()
{
        struct Complex c;
        c.real = 5;
        strcpy(c.imaginary,"4i");
```

```c
        printf("complex number is %d+%s", c.real, c.imaginary);

}
    10.//Product (id, name, quantity, price)
#include<stdio.h>
struct Product{
        int id;
        char name[30];
        int quantity;
        double price;
};
int main()
{
        struct Product p;
        p.id = 84;
        strcpy(p.name,"Pencil");
        p.quantity = 10;
        p.price = 10;

        printf("Id = %d\n", p.id);
        printf("Name = %s\n", p.name);
        printf("Quantity = %d\n", p.quantity);
        printf("Price = %lf", p.quantity*p.price);
}
```

Pass by value

```c
    1.  //Product (id, name, quantity, price)
#include<stdio.h>
typedef struct Product{
        int id;
        char name[30];
        int quantity;
        double price;
}Product;
Product store();
void display(Product);
int main()
{
        struct Product p;
        p = store();
        display(p);
}
Product store(){
        Product p;
```

```c
        p.id = 84;
        strcpy(p.name,"Pencil");
        p.quantity = 10;
        p.price = 10;
        return p;
}
void display(Product p){
        printf("Id = %d\n", p.id);
        printf("Name = %s\n", p.name);
        printf("Quantity = %d\n", p.quantity);
        printf("Price = %lf", p.quantity*p.price);
}
```

2. //Student (rollNo, name, marks)

```c
#include <stdio.h>
typedef struct Student{
        int rollNo;
        char name[15];
        double marks;
}Student;
Student store();
void display(Student);
int main()
{
        Student s;
        s = store();
        display(s);
}
Student store(){
        Student stu;
        printf("Enter your roll no: ");
        scanf("%d", &stu.rollNo);
        printf("Enter your name: ");
        scanf("%s", stu.name);
        printf("Enter your marks: ");
        scanf("%lf", &stu.marks);
        return stu;
}
void display(Student stu){
        printf("Id = %d\n", stu.rollNo);
        printf("Name = %s\n", stu.name);
        printf("Marks = %lf", stu.marks);
}
```

3. //Admin (id, name, salary, allowance)

```c
#include<stdio.h>
```

```c
typedef struct Admin{
        int id;
        char name[30];
        double salary;
        float allowance;
}Admin;
Admin store();
void display(Admin);
int main()
{
        Admin a;
        a = store();
        display(a);
}
Admin store(){
        Admin ad;
        printf("Enter your id: \n");
        scanf("%d", &ad.id);
        printf("Enter your name: \n");
        scanf("%s",ad.name);
        printf("Enter your salary: \n");
        scanf("%lf", &ad.salary);
        printf("Enter the allowance in percentage: \n");
        scanf("%f", &ad.allowance);
        return ad;
}
void display(Admin a){
   printf("Id = %d\n", a.id);
        printf("Name = %s\n", a.name);
        printf("Salary = %lf\n", a.salary);
        printf("Allowance in percentage = %f", a.allowance);
}
```

4. //HR (id, name, salary, commission)

```c
#include<stdio.h>
typedef struct HR{
        int id;
        char name[30];
        double salary;
        float comission;
}HR;
HR store();
void display(HR);
int main()
{
```

```c
        HR h;
        h=store();
        display(h);
}
HR store(){
        HR h;
        printf("Enter your id: \n");
        scanf("%d", &h.id);
        printf("Enter your name: \n");
        scanf("%s",h.name);
        printf("Enter your salary: \n");
        scanf("%lf", &h.salary);
        printf("Enter the comission in percentage: \n");
        scanf("%f", &h.comission);
        return h;
}
void display(HR h){

        printf("Id = %d\n", h.id);
        printf("Name = %s\n", h.name);
        printf("Salary = %lf\n", h.salary);
        printf("Comission in percentage = %f", h.comission);
}
    5. //SalesManager (id, name, salary, incentive, target)
//HR (id, name, salary, commission)
#include<stdio.h>
#include<string.h>
typedef struct SalesManager{
        int id;
        char name[30];
        double salary;
        float incentive;
        double target;
}SalesManager;
SalesManager store();
void display(SalesManager);
int main()
{
        SalesManager salesManager;
        salesManager = store();
        display(salesManager);
}
SalesManager store()
{
```

```c
        SalesManager salesManager;
        salesManager.id = 84;
        strcpy(salesManager.name,"Sita");
        salesManager.salary = 90000;
        salesManager.incentive = 0.5;
        salesManager.target = 10000000;
        return salesManager;
}
void display(SalesManager salesManager){
        printf("Id = %d\n", salesManager.id);
        printf("Name = %s\n", salesManager.name);
        printf("Salary = %lf\n", salesManager.salary);
        printf("Incentive in percentage = %f\n", salesManager.incentive);
        printf("Target is = %lf", salesManager.target);
}
```

6. //Date (date, month, year)

```c
#include<stdio.h>
typedef struct Day{
        int date;
        int month;
        int year;
}Day;
Day store();
void display(Day);
int main()
{
        Day d;
        d =store();
        display(d);
}
Day store()
{
        Day d;
        d.date = 10;
        d.month = 03;
        d.year = 2025;
        return d;
}
void display(Day d){
    printf("Day is %d-%d-%d", d.date, d.month, d.year);
}
```

7. //Time (hour, min, sec)

```c
#include<stdio.h>
typedef struct Time{
```

```c
        int hour;
        int min;
        int sec;
}Time;
Time store();
void display(Time);
int main()
{
        Time t;
        t = store();
        display(t);
}
Time store(){
        Time t;
        t.hour = 5;
        t.min = 11;
        t.sec = 40;
        return t;
}
void display(Time t){
        printf("Time is %d hours %d min %d sec", t.hour, t.min, t.sec);
}
```

8. //Distance (feet, inch)

```c
#include<stdio.h>
typedef struct Distance{
        int feet;
        int inch;
}Distance;
Distance store();
void display(Distance);
int main()
{
        struct Distance dis;
        dis=store();
        display(dis);
}
Distance store(){
        Distance dis;
        dis.feet = 5;
        dis.inch = 4;
        return dis;
}
void display(Distance dis){
        printf("Distance is %d feet and %d inches", dis.feet, dis.inch);
}
```

```c
}
```

9.
```c
#include <stdio.h>
typedef struct Complex{
        int imaginary;
        int real;
}Complex;

Complex store(Complex);
void display(Complex);

void main(){
        Complex c1;
        c1 = store(c1);
        display(c1);
}
Complex store(Complex c){
        printf("Enter value of real: ");
        scanf("%d",&c.real);
        printf("Enter value of imaginary:");
        scanf("%d",&c.imaginary);
        return c;
}
void display(Complex c2)
{
        printf("Complex No = %d+%di", c2.real, c2.imaginary);
}
```

10.
```c
//Product (id, name, quantity, price)
#include<stdio.h>
typedef struct Product{
        int id;
        char name[30];
        int quantity;
        double price;
}Product;
Product store();
void display(Product);
int main()
{
        struct Product p;
        p = store();
        display(p);
}
Product store(){
        Product p;
```

```c
        p.id = 84;
        strcpy(p.name,"Pencil");
        p.quantity = 10;
        p.price = 10;
        return p;
}
void display(Product p){
        printf("Id = %d\n", p.id);
        printf("Name = %s\n", p.name);
        printf("Quantity = %d\n", p.quantity);
        printf("Price = %lf", p.quantity*p.price);
}
```

Pass one structure variable to function by address

```c
    1. //Student (rollNo, name, marks)
#include <stdio.h>
typedef struct Student{
        int rollNo;
        char name[15];
        double marks;
}Student;
void store(Student*);
void display(Student*);
int main()
{
        Student s;
        store(&s);
        display(&s);
}
void store(Student * stu){

        printf("Enter your roll no: ");
        scanf("%d", &stu->rollNo);
        printf("Enter your name: ");
        scanf("%s", stu->name);
        printf("Enter your marks: ");
        scanf("%lf", &stu->marks);

}
void display(Student*  stu){
        printf("Id = %d\n", stu->rollNo);
        printf("Name = %s\n", stu->name);
        printf("Marks = %lf", stu->marks);
}
    2. //Employee (id, name, salary)
```

```c
#include<stdio.h>
struct Employee{
        int id;
        char name[30];
        double salary;
};
void store(struct Employee*);
void display(struct Employee*);
int main()
{
        struct Employee emp;

        store(&emp);
        display(&emp);
}
void store(struct Employee* e1){

        printf("Enter your id: ");
        scanf("%d", &e1->id);
        printf("Enter your name: ");
        scanf("%s", &e1->name);
        printf("Enter your salary: ");
        scanf("%lf", &e1->salary);

}
void display(struct Employee* e1){
        printf("Id = %d\n", e1->id);
        printf("Name = %s\n", e1->name);
        printf("Salary = %lf", e1->salary);
}
```

3. //Admin (id, name, salary, allowance)

```c
#include<stdio.h>
typedef struct Admin{
        int id;
        char name[30];
        double salary;
        float allowance;
}Admin;
void store(Admin*);
void display(Admin*);
int main()
{
        Admin a;
        store(&a);
```

```c
        display(&a);
}
store(Admin* ad){

        printf("Enter your id: \n");
        scanf("%d", &ad->id);
        printf("Enter your name: \n");
        scanf("%s",ad->name);
        printf("Enter your salary: \n");
        scanf("%lf", &ad->salary);
        printf("Enter the allowance in percentage: \n");
        scanf("%f", &ad->allowance);

}
void display(Admin* a){
   printf("Id = %d\n", a->id);
        printf("Name = %s\n", a->name);
        printf("Salary = %lf\n", a->salary);
        printf("Allowance in percentage = %f", a->allowance);
}
```

   4. //HR (id, name, salary, commission)

```c
#include<stdio.h>
typedef struct HR{
        int id;
        char name[30];
        double salary;
        float comission;
}HR;
void store(HR*);
void display(HR*);
int main()
{
        HR h;
        store(&h);
        display(&h);
}
void store(HR* h){

        printf("Enter your id: \n");
        scanf("%d", &h->id);
        printf("Enter your name: \n");
        scanf("%s",h->name);
        printf("Enter your salary: \n");
        scanf("%lf", &h->salary);
```

```c
        printf("Enter the comission in percentage: \n");
        scanf("%f", &h->comission);

}
void display(HR* h){

        printf("Id = %d\n", h->id);
        printf("Name = %s\n", h->name);
        printf("Salary = %lf\n", h->salary);
        printf("Comission in percentage = %f", h->comission);
}
```

5. //SalesManager (id, name, salary, incentive, target)

```c
//HR (id, name, salary, commission)
#include<stdio.h>
#include<string.h>
typedef struct SalesManager{
        int id;
        char name[30];
        double salary;
        float incentive;
        double target;
}SalesManager;
void store(SalesManager*);
void display(SalesManager*);
int main()
{
        SalesManager salesManager;
        store(&salesManager);
        display(&salesManager);
}
void store(SalesManager* salesManager)
{

        salesManager->id = 84;
        strcpy(salesManager->name,"Sita");
        salesManager->salary = 90000;
        salesManager->incentive = 0.5;
        salesManager->target = 100;

}
void display(SalesManager* salesManager){
        printf("Id = %d\n", salesManager->id);
        printf("Name = %s\n", salesManager->name);
        printf("Salary = %lf\n", salesManager->salary);
```

```c
        printf("Incentive in percentage = %f\n", salesManager->incentive);
        printf("Target is = %lf", salesManager->target);
}
    6. //Date (date, month, year)
#include<stdio.h>
typedef struct Day{
        int date;
        int month;
        int year;
}Day;
void store(Day*);
void display(Day*);
int main()
{
        Day d;
        store(&d);
        display(&d);
}
void store(Day * d)
{
        d->date = 10;
        d->month = 03;
        d->year = 2025;
}
void display(Day * d){
    printf("Day is %d-%d-%d", d->date, d->month, d->year);
}
    7. //Time (hour, min, sec)
#include<stdio.h>
typedef struct Time{
        int hour;
        int min;
        int sec;
}Time;
void store(Time*);
void display(Time*);
int main()
{
        Time t;
    store(&t);
        display(&t);
}
void store(Time * t){
```

```c
        t->hour = 5;
        t->min = 11;
        t->sec = 40;

}
void display(Time * t){
        printf("Time is %d hours %d min %d sec", t->hour, t->min, t->sec);
}
```
8. //Distance (feet, inch)
```c
#include<stdio.h>
typedef struct Distance{
        int feet;
        int inch;
}Distance;
void store(Distance*);
void display(Distance*);
int main()
{
        struct Distance dis;
        store(&dis);
        display(&dis);
}
void store(Distance * dis){

        dis->feet = 5;
        dis->inch = 4;

}
void display(Distance *dis){
        printf("Distance is %d feet and %d inches", dis->feet, dis->inch);
}
```
9.
```c
#include <stdio.h>
typedef struct Complex{
        int imaginary;
        int real;
}Complex;

void store(Complex*);
void display(Complex*);

void main(){
        Complex c1;
        store(&c1);
        display(&c1);
```

```c
}
void store(Complex *c){
        printf("Enter value of real: ");
        scanf("%d",&c->real);
        printf("Enter value of imaginary:");
        scanf("%d",&c->imaginary);

}
void display(Complex * c2)
{
        printf("Complex No = %d+%di", c2->real, c2->imaginary);
}
```

10.//Product (id, name, quantity, price)
```c
#include<stdio.h>
typedef struct Product{
        int id;
        char name[30];
        int quantity;
        double price;
}Product;
void store(Product *);
void display(Product *);
int main()
{
        struct Product p;
        store(&p);
        display(&p);
}
void store(Product * p){
        p->id = 84;
        strcpy(p->name,"Pencil");
        p->quantity = 10;
        p->price = 10;
}
void display(Product* p){
        printf("Id = %d\n", p->id);
        printf("Name = %s\n", p->name);
        printf("Quantity = %d\n", p->quantity);
        printf("Price = %lf", p->quantity*p->price);
}
```

Pass by address

1. //Student (rollNo, name, marks)
```c
#include <stdio.h>
typedef struct Student{
```

```c
        int rollNo;
        char name[15];
        double marks;
}Student;
void store(Student*, int);
void display(Student*, int);
int main()
{
        Student arr[3];
        store(arr,3);
        display(arr,3);
}
void store(Student * stu, int size){
        int i;
        for(i=0;i<3;i++){
        printf("Enter your roll no: ");
        scanf("%d", &stu[i].rollNo);
        printf("Enter your name: ");
        scanf("%s", &stu[i].name);
        printf("Enter your marks: ");
        scanf("%lf", &stu[i].marks);
        }
}
void display(Student*  stu, int size){
        int i;
        for(i=0; i<3; i++){
        printf("Id = %d\n", stu[i].rollNo);
        printf("Name = %s\n", stu[i].name);
        printf("Marks = %lf\n", stu[i].marks);
        }

}
    2.  //Employee (id, name, salary)
#include<stdio.h>
struct Employee{
        int id;
        char name[30];
        double salary;
};
void store(struct Employee*, int);
void display(struct Employee*, int);
int main()
{
        struct Employee emp[2];
```

```c
            store(emp,2);
            display(emp,2);
}
void store(struct Employee* e1, int size){
int i;
for(i=0;i<size;i++){
            printf("Enter your id: ");
        scanf("%d", &e1[i].id);
        printf("Enter your name: ");
        scanf("%s", &e1[i].name);
        printf("Enter your salary: ");
        scanf("%lf", &e1[i].salary);
}

}
void display(struct Employee* e1, int size){
        int i;
        for(i=0;i<size;i++){
            printf("Id = %d\n", e1[i].id);
        printf("Name = %s\n", e1[i].name);
        printf("Salary = %lf\n", e1[i].salary);
        }

}
    3.  //Admin (id, name, salary, allowance)
#include<stdio.h>
typedef struct Admin{
        int id;
        char name[30];
        double salary;
        float allowance;
}Admin;
void store(Admin*, int);
void display(Admin*, int);
int main()
{
        Admin a[2];
        store(a,2);
        display(a,2);
}
store(Admin* ad, int size){
        int i;
        for(i=0;i<size;i++){
        printf("Enter your id: \n");
```

```c
            scanf("%d", &ad[i].id);
            printf("Enter your name: \n");
            scanf("%s",&ad[i].name);
            printf("Enter your salary: \n");
            scanf("%lf", &ad[i].salary);
            printf("Enter the allowance in percentage: \n");
            scanf("%f", &ad[i].allowance);
            }
}
void display(Admin* a, int size){
        int i;
        for(i=0;i<size;i++){
                printf("Id = %d\n", a[i].id);
        printf("Name = %s\n", a[i].name);
        printf("Salary = %lf\n", a[i].salary);
        printf("Allowance in percentage = %f\n", a[i].allowance);
        }
}
```

4. //HR (id, name, salary, commission)

```c
#include<stdio.h>
typedef struct HR{
        int id;
        char name[30];
        double salary;
        float comission;
}HR;
void store(HR*,int);
void display(HR*,int);
int main()
{
        HR h[2];
        store(h,2);
        display(h,2);
}
void store(HR* h,int size){
        int i;
        for(i=0;i<size;i++){
                printf("Enter your id: \n");
        scanf("%d", &h[i].id);
        printf("Enter your name: \n");
        scanf("%s",&h[i].name);
        printf("Enter your salary: \n");
        scanf("%lf", &h[i].salary);
        printf("Enter the comission in percentage: \n");
```

```c
        scanf("%f", &h[i].comission);
        }
}
void display(HR* h,int size){
        int i;
        for(i=0;i<size;i++){
                printf("Id = %d\n", h[i].id);
        printf("Name = %s\n", h[i].name);
        printf("Salary = %lf\n", h[i].salary);
        printf("Comission in percentage = %f\n", h[i].comission);
        }
}
    5.  //SalesManager (id, name, salary, incentive, target)
//HR (id, name, salary, commission)
#include<stdio.h>
#include<string.h>
typedef struct SalesManager{
        int id;
        char name[30];
        double salary;
        float incentive;
        double target;
}SalesManager;
void store(SalesManager*,int);
void display(SalesManager*,int);
int main()
{
        SalesManager salesManager[2];
        store(salesManager,2);
        display(salesManager,2);
}
void store(SalesManager* salesManager,int size)
{
        int i;
        for(i=0;i<size;i++){
                printf("Enter your id: \n");
        scanf("%d", &salesManager[i].id);
        printf("Enter your name: \n");
        scanf("%s",&salesManager[i].name);
        printf("Enter your salary: \n");
        scanf("%lf", &salesManager[i].salary);
        printf("Enter the incentive: \n");
        scanf("%f", &salesManager[i].incentive);
        printf("Enter the target: \n");
```

```c
            scanf("%lf", &salesManager[i].target);
        }

}
void display(SalesManager* salesManager, int size){
        int i;
        for(i=0;i<size;i++){
                printf("Id = %d\n", salesManager[i].id);
        printf("Name = %s\n", salesManager[i].name);
        printf("Salary = %lf\n", salesManager[i].salary);
        printf("Incentive in percentage = %f\n", salesManager[i].incentive);
        printf("Target is = %lf\n", salesManager[i].target);
        }
}
    6. //Date (date, month, year)
#include<stdio.h>
typedef struct Day{
        int date;
        int month;
        int year;
}Day;
void store(Day*,int);
void display(Day*,int);
int main()
{
        Day d[2];
        store(d,2);
        display(d,2);
}
void store(Day * d, int size)
{int i;
        for(i=0;i<size;i++){
                printf("Enter date: \n");
        scanf("%d", &d[i].date);
        printf("Enter month: \n");
        scanf("%d",&d[i].month);
        printf("Enter year: \n");
        scanf("%d", &d[i].year);

}
}
void display(Day * d, int size){
        int i;
        for(i=0;i<size;i++){
```

```c
        printf("Day is %d-%d-%d\n", d[i].date, d[i].month, d[i].year);
        }

}
```
7. //Time (hour, min, sec)
```c
#include<stdio.h>
typedef struct Time{
        int hour;
        int min;
        int sec;
}Time;
void store(Time*,int);
void display(Time*,int);
int main()
{
        Time t[2];
    store(t,2);
        display(t,2);
}
void store(Time * t,int size){
        int i;
        for(i=0;i<size;i++){
                printf("Enter date: \n");
        scanf("%d", &t[i].hour);
        printf("Enter month: \n");
        scanf("%d",&t[i].min);
        printf("Enter year: \n");
        scanf("%d", &t[i].sec);

}
}
void display(Time * t,int size){
        int i;
        for(i=0;i<size;i++)
        printf("Time is %d hours %d min %d sec\n", t[i].hour, t[i].min, t[i].sec);
}
```
8. //Distance (feet, inch)
```c
#include<stdio.h>
typedef struct Distance{
        int feet;
        int inch;
}Distance;
void store(Distance*,int);
void display(Distance*,int);
```

```c
int main()
{
        struct Distance dis[1];
        store(dis,1);
        display(dis,1);
}
void store(Distance * dis,int size){
        int i;
        for(i=0;i<size;i++){
                dis[i].feet = 5;
        dis[i].inch = 4;
        }

}
void display(Distance *dis,int size){
        int i;
        for(i=0;i<size;i++){
                printf("Distance is %d feet and %d inches", dis[i].feet, dis[i].inch);
        }

}
```

9.
```c
#include <stdio.h>
typedef struct Complex{
        int imaginary;
        int real;
}Complex;

void store(Complex*,int);
void display(Complex*,int);

void main(){
        Complex c1[1];
        store(c1,1);
        display(c1,1);
}
void store(Complex *c,int size){
        int i;
        for(i=0;i<size;i++){
        printf("Enter value of real: ");
        scanf("%d",&c[i].real);
        printf("Enter value of imaginary:");
        scanf("%d",&c[i].imaginary);
        }
}
```

```c
void display(Complex * c2, int size)
{
        int i;
        for(i=0;i<size;i++){
                printf("Complex No = %d+%di", c2[i].real, c2[i].imaginary);
        }

}
```
    10.//10. Product (id, name, quantity, price)

```c
#include <stdio.h>

typedef struct Product {
    int id;
    char name[20];
    int quantity;
    float price;
} Product;
void storeArray(Product arr[], int size);
void display(Product arr[], int size);
void main() {

    int size = 3;
    Product arr[size];
    storeArray(arr, size);
    display(arr, size);
}
void storeArray(Product* arr, int size) {

        int i;
    for ( i = 0; i < size; i++) {

        printf("Enter Product Id: ");
        scanf("%d", &arr[i].id);

        printf("Enter Product Name: ");
        scanf("%s", arr[i].name);

        printf("Enter Product Quantity: ");
        scanf("%d", &arr[i].quantity);

        printf("Enter Product Price: ");
        scanf("%f", &arr[i].price);
    }
```

```c
}
void display(Product *arr, int size) {
        int i;
    for (i = 0; i < size; i++) {
        printf("\nProduct %d:\n", i + 1);
        printf("Id: %d\n", arr[i].id);
        printf("Name: %s\n", arr[i].name);
        printf("Price: %.2f\n", arr[i].price);
        printf("Quantity: %d\n", arr[i].quantity);
    }
}
```