```
1. Student:
#include<stdio.h>
#include<string.h>
struct student
{
        int roll_no;
        char name[20];
        student()
        {
                printf("\n\ndefault constructor called\n");
                this->roll_no=0;
               strcpy(this->name,"not_given");
       }
       student(int r,char* n)
       {
                printf("\n\nparameterised constructor called\n");
               this->roll_no=r;
                strcpy(this->name,n);
       }
                                       //setters(mumtator)
       void setroll(int r)
       {
               this->roll_no=r;
        }
       void setname(const char* n)
       {
```

```
strcpy(this->name,n); //setters(mumtator)
       }
                               //getters(accessors)
        int getroll()
        {
                return this->roll_no;
        }
        char* getname()
                               //getters(accessors)
       {
                return this->name;
       }
       void display()
       {
                printf("\nroll no %d is %s\n",this->roll_no,this->name);
       }
};
int main()
{
        student s1;
        int roll_no;
        char name[20];
        s1.display();
        printf("\nenter roll no of student: ");
        scanf("%d",&roll_no);
        printf("\nenter name of the student: ");
        scanf("%s",&name);
```

```
s1.setroll(roll_no);
                               //member function
        s1.setname(name);
                               //member function
        printf("\nafter setting value\n");
        s1.display();
                       //member function
        printf("\ngetter\n");
        printf("\nroll no: %d \nname: %s",s1.getroll(),s1.getname());
        student s3;
        s3.setroll(10);
        s3.setname("sachin");
        printf("\nafter setting value\n");
                       //member function
        s3.display();
        printf("\ngetter\n");
        printf("\nroll no: %d \nname: %s",s3.getroll(),s3.getname());
        student s2(42,"pragati");
                                       //member function
        s2.display();
                       //member function
        printf("\ngetter\n");
        printf("\nroll no: %d \nname: %s",s2.getroll(),s2.getname());
        return 0;
}
2. Employee:
#include<stdio.h>
#include<string.h>
struct employee
{
        int emp_id;
```

```
char name[20];
double salary;
employee()
{
       printf("\n\ndefault constructor called\n");
        this->emp_id=0;
        strcpy(this->name,"not_given");
        this->salary=0;
}
employee(int i,const char* n,double s)
{
        printf("\n\nparameterised called\n");
        this->emp_id=i;
        strcpy(this->name,n);
        this->salary=s;
}
void setid(int i) //setters(mutators)
{
        this->emp_id=i;
}
void setname(const char* n) //setters(mutators)
{
        strcpy(this->name,n);
}
void setsalary(double s) //setters(mutators)
```

```
{
               this->salary=s;
       }
       int getid()
                      //getters(accessors)
       {
               return this->emp_id;
       }
       char* getname() //getters(accessors)
       {
               return this->name;
       }
       double getsalary() //getters(accessors)
       {
               return this->salary;
       }
       void display()
       {
               printf("\nemployees detail: \nid: %d \tname: %s \tsalary: %.2lf\n",this->emp_id,this-
>name,this->salary);
       }
};
int main()
{
       employee e1;
       int emp_id;
       char name[20];
```

```
//member function
       e1.display();
       printf("\nenter employee id:\n");
       scanf("%d",&emp id);
       printf("enter employee name: \n");
       scanf("%s",&name);
       printf("enter employee salary: \n");
       scanf("%lf",&salary);
                              //member function
       e1.setid(emp_id);
       e1.setname(name);
                              //member function
       e1.setsalary(salary);
                              //member function
       printf("\nafter setting values\n");
                       //member function
       e1.display();
       printf("\nemployees detail: \nid: %d \nname: %s \nsalary:
%.2lf",e1.getid(),e1.getname(),e1.getsalary());
       employee e3;
       e3.display();
       e3.setid(401); //member function
       e3.setname("sachin"); //member function
       e3.setsalary(60000);
                              //member function
       printf("\nafter setting values\n");
       e3.display();
                       //member function
       printf("\nemployees detail: \nid: %d \nname: %s \nsalary:
%.2lf",e3.getid(),e3.getname(),e3.getsalary());
       employee e2(22,"pragati",50000);
                                              //member function
       e2.display();
                      //member function
```

double salary;

```
printf("\ngetter\n");
        printf("\nemployees detail: \nid: %d \nname: %s \nsalary:
%.2lf",e2.getid(),e2.getname(),e2.getsalary());
        return 0;
}
3. Sales manager:
#include<stdio.h>
#include<string.h>
struct sales_man
{
        int id, target;
        char name[20];
        double salary, intensive;
        sales_man()
        {
                printf("\n\ndefault constructor called\n");
                this->id=0;
                strcpy(this->name,"not_given");
                this->salary=0;
                this->target=0;
                this->intensive=0;
       }
        sales_man(int i,const char* n,double s,int t,int in)
        {
                printf("\n\nparameterised constructor called\n");
                this->id=i;
```

```
strcpy(this->name,n);
        this->salary=s;
        this->target=t;
        this->intensive=in;
}
void setid(int i) //setters(mutator)
{
        this->id=i;
}
void setname(const char* n)
                                       //setters(mutator)
{
       strcpy(this->name,n);
}
void setsalary(double s)
                               //setters(mutator)
{
        this->salary=s;
}
void settarget(int t)
                               //setters(mutator)
{
        this->target=t;
}
                                       //setters(mutator)
void setintense(double in)
{
        this->intensive=in;
}
```

```
int getid()
                               //getters(accessor)
       {
                return this->id;
        }
        char* getname()
                                       //getters(accessor)
        {
                return this->name;
        }
        double getsalary()
                                       //getters(accessor)
       {
                return this->salary;
       }
        int gettarget()
                               //getters(accessor)
       {
                return this->target;
        }
        double getintense()
                                       //getters(accessor)
       {
                return this->intensive;
       }
        void display()
       {
                printf("\nsales managers details:\nid: %d\tname: %s\tsalary: %.2If\ttarget:
%d\tintensive: %.2lf\n",this->id,this->name,this->salary,this->target,this->intensive);
       }
};
```

```
int main()
{
        sales_man m1;
        int id, target;
        char name[20];
        double salary, intensive;
        m1.display(); //member function
        printf("enter sale managers id:\n");
        scanf("%d",&id);
        printf("\nenter the name of sales manager:\n");
        scanf("%s",name);
        printf("\nenter salary of sales manager:\n");
        scanf("%lf",&salary);
        printf("\nenter target of sales manager:\n");
        scanf("%d",&target);
        printf("\nenter intensive for target completion:\n");
        scanf("%lf",&intensive);
        m1.setid(id); //member function
        m1.setname(name);
                                       //member function
        m1.setsalary(salary);
                                       //member function
        m1.settarget(target);
        m1.setintense(intensive);
                                       //member function
        printf("\nafter setting values\n");
        m1.display(); //member function
        printf("\ngetter\nsales managers details:\nid: %d\tname: %s\nsalary: %.2If\ttarget:
%d\tintensive: %.2lf\n",m1.getid(),m1.getname(),m1.getsalary(),m1.gettarget(),m1.getintense());
```

```
sales_man m3;
       m3.display();
       m3.setid(101); //member function
        m3.setname("sachin");
                                      //member function
        m3.setsalary(60000);
                                      //member function
       m3.settarget(40);
        m3.setintense(4500); //member function
        printf("\nafter setting values\n");
       m3.display(); //member function
        printf("\ngetter\nsales managers details:\nid: %d\tname: %s\nsalary: %.2lf\ttarget:
%d\tintensive: %.2lf\n",m1.getid(),m1.getname(),m1.getsalary(),m1.gettarget(),m1.getintense());
       sales_man m2(22,"pragati",50000,45,4500);
       m2.display(); //member function
       printf("\ngetter\nsales managers details:\nid: %d\tname: %s\nsalary: %.2lf\ttarget:
%d\tintensive: %.2lf\n",m2.getid(),m2.getname(),m2.getsalary(),m2.gettarget(),m2.getintense());
       return 0;
}
4. Admin:
#include<stdio.h>
#include<string.h>
struct admin
{
       int id;
       char name[20];
       double salary, allowance;
       admin()
```

```
{
        printf("\n\ndefault constructor called\n");
        this->id=0;
        strcpy(this->name,"not_given");
        this->salary=0;
        this->allowance=0;
}
admin(int i,const char* n,double s,double a)
{
        printf("\n\nparameterised constructor called\n");
        this->id=i;
        strcpy(this->name,n);
        this->salary=s;
        this->allowance=a;
}
void setid(int i) //setters(mutator)
{
        this->id=i;
}
void setname(const char* n)
                                        //setters(mutator)
{
        strcpy(this->name,n);
}
void setsalary(double s) //setters(mutator)
{
```

```
this->salary=s;
       }
       void setallow(double a)
                                       //setters(mutator)
       {
               this->allowance=a;
        }
                              //getters(accessor)
        int getid()
       {
               return this->id;
       }
                                       //getters(accessor)
        char* getname()
       {
               return this->name;
       }
        double getsalary()
                                       //getters(accessor)
       {
               return this->salary;
        }
                              //getters(accessor)
        double getallow()
       {
               return this->allowance;
       }
       void display()
       {
               printf("\nadmins details:\nid: %d\tname: %s\tsalary: %.2lf\tallowance: %.2lf\n",this-
>id,this->name,this->salary,this->allowance);
```

```
}
};
int main()
{
        admin a1;
        int id;
        char name[20];
        double salary, allowance;
                       //member function
        a1.display();
        printf("enter admin id:\n");
        scanf("%d",&id);
        printf("\nenter name of the admin:\n");
        scanf("%s",name);
        printf("\nenter salary of admin:\n");
        scanf("%lf",&salary);
        printf("\nallowance for admin:\n");
        scanf("%If",&allowance);
                       //member function
        a1.setid(id);
        a1.setname(name);
                               //member function
        a1.setsalary(salary);
                               //member function
        a1.setallow(allowance); //member function
        printf("\nafter setting values\n");
        a1.display();
                       //member function
        printf("\ngetter\n");
        printf("\nadmins details:\nid: %d\nname: %s\nsalary: %.2If\nallowance:
%.2lf\n",a1.getid(),a1.getname(),a1.getsalary(),a1.getallow());
```

```
admin a3;
       a3.display();
        a3.setid(101); //member function
        a3.setname("sachin"); //member function
        a3.setsalary(60000);
                              //member function
        a3.setallow(6000);
                               //member function
        printf("\nafter setting values\n");
                       //member function
        a3.display();
        printf("\ngetter\n");
        printf("\nadmins details:\nid: %d\nname: %s\nsalary: %.2If\nallowance:
%.2lf\n",a3.getid(),a3.getname(),a3.getsalary(),a3.getallow());
        admin a2(101,"pragati",50000,4500);
        a2.display();
                       //member function
        printf("\ngetter\n");
        printf("\nadmins details:\nid: %d\nname: %s\nsalary: %.2If\nallowance:
%.2If\n",a2.getid(),a2.getname(),a2.getsalary(),a2.getallow());
        return 0;
}
5. HR manager:
#include<stdio.h>
#include<string.h>
struct hr_manager
{
        int id;
        char name[20];
        double salary, commission;
```

```
hr_manager()
{
        printf("\n\ndefault constructor called\n");
        this->id=0;
        strcpy(this->name,"not_given");
        this->salary=0;
        this->commission=0;
}
hr_manager(int i,const char* n,double s,double c)
{
        printf("\n\nparameterised constructor called\n");
        this->id=i;
        strcpy(this->name,n);
        this->salary=s;
        this->commission=c;
}
void setid(int i) //setters(mutator)
{
        this->id=i;
}
                                       //setters(mutator)
void setname(const char* n)
{
        strcpy(this->name,n);
}
void setsalary(double s) //setters(mutator)
```

```
{
       this->salary=s;
}
void setcomm(double c)
                            //setters(mutator)
{
       this->commission=c;
}
int getid()
           //getters(accessor)
{
       return this->id;
}
char* getname()
                            //getters(accessor)
{
       return this->name;
}
                            //getters(accessor)
double getsalary()
{
       return this->salary;
}
double getcomm() //getters(accessor)
{
       return this->commission;
}
void display()
{
```

```
printf("\nHR Managers detail: \nid: %d\tName: %s\tSalary: %.2lf\tCommission:
%.2lf\n",this->id,this->name,this->salary,this->commission);
       }
};
int main()
{
       hr_manager h1;
       int id;
       char name[20];
       double salary, commission;
       h1.display();
                       //member function
       printf("\nenter hr managers id:\n");
       scanf("%d",&id);
       printf("\nenter name of hr manager:\n");
       scanf("%s",name);
        printf("\nenter salary of hr manager:\n");
       scanf("%lf",&salary);
        printf("\nenter commission for hr manager:\n");
       scanf("%lf",&commission);
                       //member function
       h1.setid(id);
       h1.setname(name);
                               //member function
       h1.setsalary(salary);
                              //member function
                                       //member function
       h1.setcomm(commission);
       printf("\nafter setting values\n");
       h1.display();
                       //member function
```

```
printf("\ngetter\nHR Managers detail: \nid: %d\nName: %s\nSalary: %.2If\nCommission:
%.2lf\n",h1.getid(),h1.getname(),h1.getsalary(),h1.getcomm());
       hr_manager h3;
       h3.display();
       h3.setid(101); //member function
       h3.setname("sachin"); //member function
       h3.setsalary(60000);
                             //member function
       h3.setcomm(6000);
                              //member function
       printf("\nafter setting values\n");
       h3.display();
                      //member function
        printf("\ngetter\nHR Managers detail: \nid: %d\nName: %s\nSalary: %.2If\nCommission:
%.2If\n",h3.getid(),h3.getname(),h3.getsalary(),h3.getcomm());
        hr_manager h2(202,"pragati",50000,5000);
                                                     //member function
       h2.display();
                      //member function
       printf("\ngetter\nHR Managers detail: \nid: %d\nName: %s\nSalary: %.2lf\nCommission:
%.2lf\n",h2.getid(),h2.getname(),h2.getsalary(),h2.getcomm());
       return 0;
}
6. Date:
#include<stdio.h>
struct date
{
       int day, month, year;
       date()
       {
               printf("\n\ndefault constructor called\n");
               this->day=0;
```

```
this->month=0;
       this->year=0;
}
date(int d,int m,int y)
{
       printf("\n\nparameterised constructor called\n");
       this->day=d;
       this->month=m;
       this->year=y;
}
void setday(int d)
                       //setter(mutator)
{
       this->day=d;
}
void setmonth(int m) //setter(mutator)
{
       this->month=m;
}
void setyear(int y)
                              //setter(mutator)
{
       this->year=y;
}
int getday()
               //getters(accessor)
{
       return this->day;
```

```
}
                               //getters(accessor)
       int getmonth()
       {
               return this->month;
       }
                               //getters(accessor)
       int getyear()
       {
               return this->year;
       }
       void display()
       {
               printf("\n\ndate is: \n %d/%d/%d\n",this->day,this->month,this->year);
       }
};
int main()
{
        date d1;
        int day, month, year;
        d1.display();
                      //member function
        printf("\nenter date: ");
       scanf("%d",&day);
        printf("\nenter month: ");
       scanf("%d",&month);
        printf("\nenter year: ");
       scanf("%d",&year);
```

```
d1.setday(day);
                              //member function
       d1.setmonth(month);
                                      //member function
       d1.setyear(year);
                                      //member function
        printf("\nafter setting values\n");
       d1.display();
                      //member function
        printf("\ngetter\ndate: %d\nmonth: %d\nyear: %d\n",d1.getday(),d1.getmonth(),d1.getyear());
       date d3;
       d3.display();
       d3.setday(4);
                              //member function
       d3.setmonth(10);
                                      //member function
       d3.setyear(2018);
                                      //member function
        printf("\nafter setting values\n");
                      //member function
       d1.display();
       printf("\ngetter\ndate: %d\nmonth: %d\nyear: %d\n",d1.getday(),d1.getmonth(),d1.getyear());
       date d2(23,4,2001);
                                      //member function
       d2.display();
        printf("\ngetter\ndate: %d\nmonth: %d\nyear: %d\n",d2.getday(),d2.getmonth(),d2.getyear());
       return 0;
}
7. Time:
#include<stdio.h>
struct time
{
       int hr,min,sec;
       time()
```

```
{
        printf("\n\ndefault constructor called\n");
        this->hr=-1;
        this->min=-1;
        this->sec=-1;
}
time(int h,int m,int s)
{
        printf("\n\nparameterised constructor called\n");
        this->hr=h;
        this->min=m;
        this->sec=s;
}
void sethour(int h)
                                //setter(mutator)
{
        this->hr=h;
}
void setmin(int m)
                                //setter(mutator)
{
        this->min=m;
}
                                //setter(mutator)
void setsec(int s)
{
        this->sec=s;
}
```

```
//getter(accessor)
       int gethr()
       {
                return this->hr;
       }
       int getmin()
                       //getter(accessor)
       {
                return this->min;
       }
                       //getter(accessor)
       int getsec()
       {
                return this->sec;
       }
       void display()
       {
                printf("\ntime is: %d:%d:%d\n",this->hr,this->min,this->sec);
       }
};
void display(time*);
int main()
{
        time t1;
        int hr,min,sec;
       int r,q;
       t1.display();
                       //member function
        printf("\nenter hours:\n");
```

```
scanf("%d",&hr);
printf("\nenter minuits:\n");
scanf("%d",&min);
printf("\nenter seconds:\n");
scanf("%d",&sec);
if(sec>=60)
{
       r=sec%60;
       q=sec/60;
       sec=r;
       min=min+q;
}
if(min>=60)
{
       r=min%60;
       q=min/60;
       min=r;
       hr=hr+q;
}
                       //member function
t1.setsec(sec);
t1.setmin(min);
                       //member function
                       //member function
t1.sethour(hr);
printf("\nafter setting value\n");
t1.display();
               //member function
printf("\ngetter\nhour: %d\nmin: %d\nsec: %d\n",t1.gethr(),t1.getmin(),t1.getsec());
```

```
time t3;
        t3.display();
                               //member function
        t3.setsec(40);
        t3.setmin(56);
                               //member function
        t3.sethour(7);
                               //member function
        printf("\nafter setting value\n");
        t3.display();
                       //member function
        printf("\ngetter\nhour: %d\nmin: %d\nsec: %d\n",t3.gethr(),t3.getmin(),t3.getsec());
        time t2(10,49,55);
                                        //member function
        t2.display();
                       //member function
        printf("\ngetter\nhour: %d\nmin: %d\nsec: %d\n",t1.gethr(),t1.getmin(),t1.getsec());
        return 0;
}
8. Distance:
#include<stdio.h>
struct distance
{
        int feet,inch;
        distance()
        {
                printf("\n\ndefault constructor called\n");
                this->feet=-1;
                this->inch=-1;
       }
        distance(int f,int i)
```

```
{
        printf("\n\nparameterised constructor called\n");
        this->feet=f;
        this->inch=i;
}
                        //setter(mutator)
void setfeet(int f)
{
        this->feet=f;
}
                                //setter(mutator)
void setinch(int i)
{
        this->inch=i;
}
               //getter(accessor)
int getfeet()
{
        return this->feet;
}
int getinch()
              //getter(accessor)
{
        return this->inch;
}
void display()
{
        printf("\ndistance is: %d feet and %d inches\n",this->feet,this->inch);
}
```

```
};
int main()
{
        distance d1;
        int feet,inch;
        d1.display();
                       //member function
        printf("\nenter distance in feet:\n");
        scanf("%d",&feet);
        printf("\nenter distance in inch:\n");
        scanf("%d",&inch);
        d1.setfeet(feet);
                               //member function
        d1.setinch(inch);
                               //member function
        printf("\nafter setting values\n");
        d1.display();
                       //member function
        printf("\ngetter\nfeet: %d\ninch: %d\n",d1.getfeet(),d1.getinch());
        distance d3;
        d3.display();
        d3.setfeet(6); //member function
        d3.setinch(2); //member function
        printf("\nafter setting values\n");
        d3.display();
                       //member function
        printf("\ngetter\nfeet: %d\ninch: %d\n",d3.getfeet(),d3.getinch());
        distance d2(5,2);
                               //member function
        d2.display();
                       //member function
        printf("\ngetter\nfeet: %d\ninch: %d\n",d2.getfeet(),d2.getinch());
```

```
return 0;
}
9. Complex:
#include<stdio.h>
struct complex
{
        int real,imag;
        complex()
        {
                printf("\n\ndefault constructor called\n");
                this->real=0;
                this->imag=0;
        }
        complex(int r,int i)
        {
                printf("\n\nparameterised constructor called\n");
                this->real=r;
                this->imag=i;
        }
                                        //setters(mutator)
        void setreal(int r)
        {
                this->real=r;
        }
        void setimg(int i)
                                //setters(mutator)
        {
```

```
this->imag=i;
       }
                               //getters(accessor)
        int getreal()
       {
               return this->real;
        }
        int getimag() //getters(accessor)
       {
               return this->imag;
       }
       void display()
       {
               printf("\ncomplex number: %d+%di\n",this->real,this->imag);
       }
};
int main()
{
        complex c1;
        c1.display();
                       //member function
        int real,imag;
        printf("\nenter real part of complex number:\n");
        scanf("%d",&real);
        printf("\nenter imaginary part of complex number:\n");
        scanf("%d",&imag);
        c1.setreal(real); //member function
```

```
c1.setimg(imag);
                               //member function
        printf("\nafter setting values\n");
                               //member function
        c1.display();
        printf("\ngetter\n");
        printf("\ncomplex number: %d+%di\n",c1.getreal(),c1.getimag());
        complex c3;
        c3.display();
        c3.setreal(15); //member function
        c3.setimg(3); //member function
        printf("\nafter setting values\n");
                               //member function
        c3.display();
        printf("\ngetter\n");
        printf("\ncomplex number: %d+%di\n",c3.getreal(),c3.getimag());
        complex c2(10,2);
                               //member function
        c2.display();
                       //member function
        printf("\ngetter\n");
        printf("\ncomplex number: %d+%di\n",c2.getreal(),c2.getimag());
        return 0;
}
10. Department:
#include<stdio.h>
#include<string.h>
struct dept
{
        int did;
```

```
char dname[20];
dept()
{
        printf("\nDefault constructor called\n");
        this->did=0;
        strcpy(this->dname,"not_given");
}
dept(int i,char* n)
{
        printf("\nParameterised constructor called\n");
        this->did=i;
        strcpy(this->dname,n);
}
void setid(int i)
{
        this->did=i;
}
void setname(char* n)
{
        strcpy(this->dname,n);
}
int getid()
{
        return this->did;
}
```

```
char* getname()
       {
               return this->dname;
       }
       void display()
       {
               printf("\ndepartment details:\nDept id: %d\tName: %s\n",this->did,this->dname);
       }
};
int main()
{
        dept d1;
        d1.display();
        int id;
        char name[20];
        printf("\nEnter department id:\n");
       scanf("%d",&id);
        printf("\nEnter department name:\n");
        scanf("%s",name);
        d1.setid(id);
        d1.setname(name);
        printf("\nafter setting value\n");
        d1.display();
        printf("\n*getters*\ndept id: %d\ndept name: %s\n",d1.getid(),d1.getname());
        dept d2;
```

```
d2.display();
        d2.setid(10);
        d2.setname("comp_sci");
        printf("\nafter setting value\n");
        d2.display();
        printf("\n^*getters^*\ndept id: %d\ndept name: %s\n",d2.getid(),d2.getname());
        dept d3(20,"mathematics");
        d3.display();
        printf("\n*getters*\ndept id: %d\ndept name: %s\n",d3.getid(),d3.getname());
        return 0;
}
11. Player:
#include<stdio.h>
#include<string.h>
struct player
{
        int jersey;
        char pname[20],sname[20];
        player()
        {
                printf("\nDefault constructor called\n");
                this->jersey=0;
                strcpy(this->pname,"not_given");
                strcpy(this->sname,"not_given");
       }
```

```
player(int i,char* n,char* s)
{
        printf("\nParameterised constructor called\n");
        this->jersey=i;
        strcpy(this->pname,n);
        strcpy(this->sname,s);
}
void setjersey(int j)
{
        this->jersey=j;
}
void setpname(char* n)
{
        strcpy(this->pname,n);
}
void setsport(char* s)
{
        strcpy(this->sname,s);
}
int getjersey()
{
        return this->jersey;
}
char* getname()
{
```

```
return this->pname;
       }
        char* getsport()
        {
                return this->sname;
        }
       void display()
       {
                printf("\nplayers detail: \njersey no: %d\tName: %s\tSport: %s\n",this->jersey,this-
>pname,this->sname);
       }
};
int main()
{
        player p1;
        p1.display();
        int j;
        char name[20],sport[20];
        printf("\nEnter jersey no:\n");
        scanf("%d",&j);
        printf("\nEnter player name:\n");
        scanf("%s",name);
        printf("\nEnter sport name:\n");
        scanf("%s",sport);
        p1.setjersey(j);
        p1.setpname(name);
```

```
p1.setsport(sport);
        printf("\nafter setting value\n");
        p1.display();
        printf("\n*gatter*\njersey no: %d\nplayer name: %s\nsport name:
%s\n",p1.getjersey(),p1.getname(),p1.getsport());
        player p2;
        p2.display();
        p2.setjersey(7);
        p2.setpname("M.S.Dhoni");
        p2.setsport("cricket");
        printf("\nafter setting value\n");
        p2.display();
        printf("\n*gatter*\njersey no: %d\nplayer name: %s\nsport name:
%s\n",p2.getjersey(),p2.getname(),p2.getsport());
        player p3(7,"Ronaldo","football");
        p3.display();
        printf("\n*gatter*\njersey no: %d\nplayer name: %s\nsport name:
%s\n",p3.getjersey(),p3.getname(),p3.getsport());
        return 0;
}
12. Team:
#include<stdio.h>
#include<string.h>
struct team
{
        int tid,no_emp;
        char tname[20],thead[20];
```

```
team()
{
        printf("\nDefault constructor called\n");
        this->tid=0;
        strcpy(this->tname,"not_given");
       strcpy(this->thead,"not_given");
        this->no_emp=0;
}
team(int i,char* n,char* h,int ne)
{
        printf("\nParameterised constructor called\n");
        this->tid=i;
       strcpy(this->tname,n);
        strcpy(this->thead,h);
        this->no_emp=ne;
}
void setid(int i)
{
        this->tid=i;
}
void setname(char* n)
{
       strcpy(this->tname,n);
}
void sethead(char* h)
```

```
{
       strcpy(this->thead,h);
}
void setemp(int ne)
{
       this->no_emp=ne;
}
int getid()
{
       return this->tid;
}
char* getname()
{
       return this->tname;
}
char* gethead()
{
       return this->thead;
}
int getemp()
{
       return this->no_emp;
}
void display()
{
```

```
printf("\nTeam details:\nteam id: %d\tName: %s\nHead of team: %s\t No. of employee:
%d\n",this->tid,this->tname,this->thead,this->no emp);
       }
};
int main()
{
       team t1;
        int id,emp;
        char name[20],head[20];
       t1.display();
        printf("\nEnter team id:\n");
        scanf("%d",&id);
        printf("\nEnter team name:\n");
        scanf("%s",name);
        printf("\nEnter name of team head:\n");
        scanf("%s",head);
        printf("\nEnter no of employees working in that team:\n");
        scanf("%d",&emp);
        t1.setid(id);
       t1.setname(name);
       t1.sethead(head);
       t1.setemp(emp);
        printf("\nafter setting value:\n");
       t1.display();
        printf("\n*getter*\nteam id: %d\nteam name: %s\nteam head: %s\nno. of employees:
%d\n",t1.getid(),t1.getname(),t1.gethead(),t1.getemp());
```

```
team t2;
t2.display();
t2.setid(11);
t2.setname("Quality_assurance");
t2.sethead("Prakruti");
t2.setemp(15);
printf("\nafter setting value:\n");
t2.display();
printf("\n*getter*\nteam id: %d\nteam name: %s\nteam head: %s\nno. of employees: %d\n",t2.getid(),t2.getname(),t2.gethead(),t2.getemp());
team t3(22,"front_end","Pragati",25);
t3.display();
printf("\n*getter*\nteam id: %d\nteam name: %s\nteam head: %s\nno. of employees: %d\n",t3.getid(),t3.getname(),t3.gethead(),t3.getemp());
}
```