

## PRACTICAL 06

### PROGRAM:

```
#include<iostream>

#include<string.h>

using namespace std;

class Hospital
{
public:
    string hospital_name,location,contact;
    int available_beds,beds_price;
    float rating;
    void getHospitalData()
    {

        cout<<"\nEnter the hospital name:"<<endl;
        cin>>hospital_name;
        cin.ignore();
        cout<<"Enter the location:"<<endl;
        getline(cin,location);
        cout<<"Enter the rating:"<<endl;
        cin>>rating;
        cout<<"Enter contact:"<<endl;
        cin>>contact;
        cout<<"enter price per bed"<<endl;
        cin>>beds_price;
    }

    void printhospitaldata()
```

```

{
    cout<<"\nHospital's name:"<<hospital_name<<endl;
    cout<<"Location:"<<location<<endl;
    cout<<"Available beds:"<<available_beds<<endl;
    cout<<"Rating:"<<rating<<endl;
    cout<<"Contact:"<<contact<<endl;
    cout<<"Price per bed:"<<beds_price<<endl;
}

```

```

int searchHospitalbyName(string hosp_name)

```

```

{
    int x=1;
    if(hospital_name==hosp_name)
    {
        cout<<"\nMatch found"<<endl;
        return x;
    }
    else{
        cout<<"\nNot found"<<endl;
        x=2;
        return x;
    }
}

```

```

int searchbyavailablebeds(int avail_bed)

```

```

{
    int y=1;
    if(available_beds==avail_bed)
    {

```

```

        cout<<"\nMatch found"<<endl;
        return y;
    }
    else{
        cout<<"\nNot found"<<endl;
        y=2;
        return y;
    }
}

```

```

void updatehospitalinfo()

```

```

{

    cout<<"\nEnter the hospital name:"<<endl;
    cin>>hospital_name;
    cin.ignore();
    cout<<"Enter the location:"<<endl;
    getline(cin,location);
    cout<<"Enter the rating:"<<endl;
    cin>>rating;
    cout<<"Enter contact:"<<endl;
    cin>>contact;
    cout<<"enter price per bed"<<endl;
    cin>>beds_price;
}
};

```

```

class Patient : public Hospital

```

```

{

```

```
public:
    string P_name;
    int P_id;
    void getPatientData()
    {
        cin.ignore();
        cout<<"\nEnter Patient's Name:"<<endl;
        getline(cin,P_name);
        cout<<"Enter Patient's Id:"<<endl;
        cin>>P_id;
    }

    void printpatientdata()
    {
        cout<<"\nPatient Name:"<<P_name<<endl;
        cout<<"Patient's Id:"<<P_id<<endl;
    }

    void updatepatientdata()
    {
        cin.ignore();
        cout<<"\nEnter Patient's Name:"<<endl;
        getline(cin,P_name);
        cout<<"Enter Patient's Id:"<<endl;
        cin>>P_id;
    }

};
```

```

int main()
{
    Hospital h[50];
    Patient p[50];
    int updatechoice, i=0,avail_bed,t,noofpatients,newnoofpatients,x,y;
    string hosp_name;
    char choice;

    cout<<"Enter no. of patients"<<endl;
    cin>>noofpatients;
    for(i=0;i<1;i++)
    {
        h[i].getHospitalData();
    }
    {
        for(i=0;i<noofpatients;i++)
            p[i].getPatientData();
    }
    while(1)
    {
        cout<<"\n1.print hospital's data"<<endl;
        cout<<"2.print patient's data"<<endl;
        cout<<"3.search hospital by name"<<endl;
        cout<<"4.search by available beds"<<endl;
        cout<<"5.update info"<<endl;
        cout<<"6.exit"<<endl;
        cout<<"enter choice"<<endl;
        cin>>updatechoice;
        switch(updatechoice)

```

```
{
```

case 1:

```
    for(i=0;i<1;i++)  
        h[i].printhospitaldata();  
    i++;  
    break;
```

case 2:

```
    for(i=0;i<noofpatients;i++){  
        p[i].printpatientdata();  
        cout<<"\n";  
    }  
    break;
```

case 3:

```
cin.ignore();  
getline(cin,hosp_name);  
for(t=0;t<1;t++)  
{  
    x=h[t].searchHospitalbyName(hosp_name);  
    if(x==1)  
        h[t].printhospitaldata();  
}  
    break;
```

case 4:

```
    cin>>avail_bed;
```

```

for(t=0;t<1;t++)
{
    y=h[t].searchbyavailablebeds(avail_bed);
    if(y==1)
        h[t].printhospitaldata();
}

    break;
case 5:
    cout<<"\nWhat would you like to update? p or h?"<<endl;
    cin>>choice;
    if(choice=='p'){
        cout<<"Enter new number of patients"<<endl;
        cin>>newnoofpatients;
        for(i=0;i<newnoofpatients;i++)
            p[i].updatepatientdata();
    }
    else if(choice=='h'){
        cout<<"Enter new hospital data"<<endl;
        for(i=0;i<1;i++)
            h[i].updatehospitalinfo();
    }
    else{
        cout<<"Wrong choice!"<<endl;
    }
    break;

case 6:
    exit(0);

```

```
        break;
    }
}
return 0;
}
```

**OUTPUT:**



```
/tmp/TlzQRQsgyi.o
Enter no. of patients
2
Enter the hospital name:
bagwati
Enter the location:
kuhu
Enter the rating:
8
Enter contact:
5469871235
enter price per bed
78
Enter Patient's Name:
shardul
Enter Patient's Id:
457
Enter Patient's Name:
shiki
Enter Patient's Id:
45
1.print hospital's data
2.print patient's data
3.search hospital by name
4.search by available beds
5.update info
6.quit
```

```
1.print hospital's data
2.print patient's data
3.search hospital by name
4.search by available beds
5.update info
6.exit
```

enter choice

1

Hospital's name:bagwati

Location:kuhu

Available beds:0

Rating:8

Contact:5469871235

Price per bed:78

```
1.print hospital's data
2.print patient's data
3.search hospital by name
4.search by available beds
5.update info
6.exit
```

enter choice

2

Patient Name:shardul

Patient's Id:457

Patient Name:shiki

Patient's Id:45

- 1.print hospital's data
- 2.print patient's data
- 3.search hospital by name
- 4.search by available beds
- 5.update info
- 6.exit

enter choice

3

bagwati

Match found

Hospital's name:bagwati

Location:kuhu

Available beds:0

Rating:8

Contact:5469871235

Price per bed:78

- 1.print hospital's data
- 2.print patient's data
- 3.search hospital by name
- 4.search by available beds

Hospital's name:bagwati

Location:kuhu

Available beds:0

Rating:8

Contact:5469871235

Price per bed:78

1.print hospital's data

2.print patient's data

3.search hospital by name

4.search by available beds

5.update info

6.exit

enter choice

4

4

Not found

1.print hospital's data

2.print patient's data

3.search hospital by name

4.search by available beds

5.update info

6.exit

enter choice

5

```
5.update info
6.exit
enter choice
5
What would you like to update? p or h?
h
Enter new hospital data

Enter the hospital name:
kuhu
Enter the location:
shimla
Enter the rating:
8
Enter contact:
4569874125
enter price per bed
89
1.print hospital's data
2.print patient's data
3.search hospital by name
4.search by available beds
5.update info
6.exit
enter choice
6
```