**SDF LAB TEST 1**

**NAME :- RAHI AGARWAL**

**BATCH:- F8**

**ENROLL NO :- 9921103145**

**Q1)**

**#include<iostream>**

**using namespace std;**

**class TwoDimensionArray**

**{**

**public:**

**int i,j;**

**row=0;**

**column=0;**

**int \*arr=new int[row];**

**for(i=0;i<row;i++)**

**{**

**arr[i]=new int[column];**

**}**

**for(i=0;i<=row;i++)**

**{**

**for(j=0;j<=column;j++)**

**{**

**arr[i][j]=0;**

**}**

**}**

**}**

**TwoDimensionArray(int a,int b)**

**{**

**row=a;**

**column=b;**

**}**

**void set()**

**{**

**int i,j;**

**int \*arr=new int[row];**

**for(i=0;i<row;i++)**

**{**

**arr[i]=new int[column];**

**}**

**cout<<"Enters The Numbers In 2D Array";**

**for(i=0;i<row;i++)**

**{**

**for(j=0;j<column;j++)**

**{**

**cin>>arr[i][j];**

**}**

**}**

**}**

**void call(int m,int n)**

**{**

**int y;**

**y=\*((\*arr + m)+n);**

**cout<<"The Element In The " << m << " row and " << n << " column is " << y <<endl;**

**}**

**};**

**int main()**

**{**

**int m,n;**

**TwoDimensionArray ob(3,3);**

**ob.set();**

**cout<<"Enter The Position You Want To Search In Array";**

**cin>>m;**

**cin>>n;**

**ob.call(m,n);**

**return 0;**

**}**

**Q2)**

**#include<iostream>**

**using namespace std;**

**class Patient //Base Class of name patient**

**{**

**int age;**

**char name[50];**

**char gender[20];**

**public:**

**void input\_patient\_details()**

**{**

**cout<<"Enter Patient Details";**

**cout<<"Patient Name : ";**

**cin>>name;**

**cout<<"\n Patient Age : ";**

**cin>>age;**

**cout<<"gender : ";**

**cin>>gender;**

**}**

**void display\_patient\_details()**

**{**

**cout<<"Displaying Patient Details";**

**cout<<"Patient Name : "<<patient\_name;**

**cout<<"Patient Age : "<<age;**

**cout<<"gender : "<<gender;**

**}**

**};**

**class IPD //Base Class**

**{**

**public:**

**int ward\_no;**

**int bed\_no;**

**int charge\_per\_day;**

**public:**

**void input\_ipd\_details()**

**{**

**cout<<"Enter IPD Details ";**

**cout<<"Ward No. : ";**

**cin>>ward\_no;**

**cout<<"\Bed No. : ";**

**cin>>bed\_no;**

**cout<<"\n Charge Per Day : ";**

**cin>>charge\_per\_day;**

**}**

**void display\_ipd\_details()**

**{**

**int d;**

**cout<<"Displaying IPD Details";**

**cout<<"Ward No. : "<<ward\_no;**

**cout<<"Bed No. : "<<bed\_no;**

**cout<<"Charge Per Day : "<<charge\_per\_day;**

**}**

**};**

**class IPDPatient :**

**public IPD,**

**public Patient**

**{**

**int no\_of\_days\_admitted;**

**public:**

**void input\_ipd\_patient\_details()**

**{**

**input\_patient\_details();**

**input\_ipd\_details();**

**cout<<"\n\n Enter No. of Days Admitted : ";**

**cin>>no\_of\_days\_admitted;**

**}**

**void display\_ipd\_patient\_details()**

**{**

**display\_patient\_details();**

**display\_ipd\_details();**

**cout<<"No. of Days Admitted : "<<no\_of\_days\_admitted;**

**}**

**};**

**int main()**

**{**

**int d;**

**if charge\_per\_day>10000**

**{**

**d=(charge\_per\_day\*input\_ipd\_patient\_details.no\_of\_days\_admitted/100)\*10;**

**input\_ipd\_details.charge\_per\_day=input\_ipd\_details.charge\_per\_day-d;**

**cout<<"\n Charge Per Day : "<<input\_ipd\_details.charge\_per\_day;**

**}**

**IPDPatient \*ipd;**

**int i,a;**

**cout<<"Enter No. of Patient Details You Want : ";**

**cin>>a;**

**ipd=new IPDPatient[a];**

**for(i=0;i<a;i++)**

**{**

**ipd[i].input\_ipd\_patient\_details();**

**ipd[i].display\_ipd\_patient\_details();**

**}**

**return 0;**

**}**



