A

A

B

A

*PROBLEM STATEMENT\_1(5-marks)*

**#include <iostream>**

**using namespace std;**

**class student**

**{**

**public:**

**int rollno;**

**char \*name;**

**};**

class academics:virtual public student

{

public:

int marks;

void get()

{

cin>>rollno;

name=new char [100];

cin.ignore();

cin.getline(name,100);

cin>>marks;

}

};

class accounts:virtual public student

{

public:

int fees,dues;

void account()

{

cin>>fees>>dues;

}

};

class Information:public academics, public accounts

{

public:

void info()

{

cout<<rollno<<endl<<name<<endl<<marks<<endl;

{if(marks>=90)

{

cout<<"A\n";

}

else if(marks>=75 && marks<90)

{

cout<<"B\n";

}

else if(marks>=60 && marks<75)

{

cout<<"C\n";

}

else if(marks>=45 && marks<60)

{

cout<<"D\n";

}

else

cout<<"F\n";

}

cout<<fees<<endl<<dues<<endl;

}

};

**int main() {**

**Information i;**

**i.get();**

**i.account();**

**i.info();**

**return 0;**

**}**

*PROBLEM STATEMENT\_2(10-marks)*

**#include<iostream>**

**using namespace std;**

**class employee**

**{**

**char emp\_name[20];**

**public:**

**void read\_emp\_name()**

**{**

**// cout<<"Enter name of employee";**

**cin.ignore();**

**cin.getline(emp\_name,20);**

**}**

**void show()**

**{**

**cout<<"Employee Name="<<emp\_name<<endl;**

**}**

**virtual void input()=0;**

**virtual int isunderperformer()=0;**

**};**

class marketing\_executive:public employee

{

int no\_of\_account;

public:

void input()

{

read\_emp\_name();

// cout<<"\nEnter number of accounts opened";

cin>>no\_of\_account;

}

int isunderperformer()

{ show();

if(no\_of\_account<20)

cout<<"Employee should be terminated";

else

cout<<"Employee is a good performer";

}

};

class manager:public employee{

double target;

public:

void input()

{

read\_emp\_name();

// cout<<"\nEnter target amount achieved=";

cin>>target;

}

int isunderperformer()

{

show();

if(target<1000000)

cout<<"Employee should be terminated";

else

cout<<"Employee is a good performer";

}

};

int main()

{

employee \*ptr[2];

marketing\_executive mke;

manager mng;

int n=0;

int ch;

cin>>ch;

switch(ch)

{

case 1:

ptr[0]=&mke;

ptr[0]->input();

ptr[0]->isunderperformer();

break;

case 2:

ptr[1]=&mng;

ptr[1]->input();

ptr[1]->isunderperformer();

break;

default:

cout<<"invalid choice";

}

return 0;

}