

Write a program to implement virtual base class

```
#include<iostream>
using namespace std;
class student
{
protected:
    int roll_no;
public:
    void get_data();
    void put_data();
};
void student::get_data()
{
    cout<<"enter the roll\n";
    cin>>roll_no;
}
void student::put_roll()
{
    cout<<"roll is:"<<roll_no<<endl;
}
class test:virtual public student
{
protected:
    int paper1,paper2;
public:
    void get_marks();
    void gput_data();
};
void test::get_marks()
{
    cout<<"enter the marks\n";
    cin>>paper1>>paper2;
}
void test::put_marks()
{
    cout<<"marks in paper1:"<<paper1<<endl;
    cout<<"marks in paper2:"<<paper2<<endl;
}
```

```

class sports:public virtual student
{
protected:
    int score;
public:
    void get_score();
    void put_marks();
};
void sport::get_score()
{
cout<<"enter the score\n";
cin>>score;
}
void sports::put_score()
{
cout<<"score="<<score<<endl;
}
class result:public test,public sports
{
private:
    int total;
public:
    void diplay();
};
void result::display()
{
total=paper1+paper2+score;
put_roll();
put_marks();
put_score();
cout<<"total score="<<total<<endl;
}
int main()
{
result P;
P.get_data();
p.get_marks();
P.get_score();
P.display();
return(0);
}

```

Output

enter the roll

10

enter the marks

80 90

enter the score

50

roll is:10

marks in paper1:80

marks in paper2:90

score=50

total score=220