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1  #include<iostream>
2  using namespace std;
3  class student
4  {
5      protected:
6          char name[10];
7          int rollno;
8      public:
9          void getdata()
10         {
11             cout<<"Enter name: ";
12             cin>>name;
13             cout<<"Enter Roll number: ";
14             cin>>rollno;
15         }
16         void display()
17         {
18             cout<<"\n\nName:\t"<<name;
19             cout<<"\nRoll number:\t"<<rollno;
20         }
21     };
22
23     class marks:virtual public student
24     {
25     private:
26         int m1,m2,m3,m4,m5;
27     public:
28         void getmarks()
29         {
30             cout<<"\nEnter marks of 5 subjects: \n";
31             cin>>m1>>m2>>m3>>m4>>m5;
32         }
33         void displaymks()
34         {
35             cout<<"\n\nYour marks are:\n\n";
36             cout<<"Subject 1:\t"<<m1;
37             cout<<"\nSubject 2:\t"<<m2;
38             cout<<"\nSubject 3:\t"<<m3;
39             cout<<"\nSubject 4:\t"<<m4;
40             cout<<"\nSubject 5:\t"<<m5;
41         }
42         int common()
43         {
44             int to;
45             to=m1+ m2+m3+m4+m5;
46             return(to);
47         }
48     };
49     class sports:virtual public student
50     {
51     private:
52         int sptsmarks;
53     public:
54         void getsportsmarks()
55         {
56             cout<<"Enter sports marks: ";
57             cin>>sptsmarks;
58         }
59         int returnsptsmarks()
60         {
61             return(sptsmarks);
62         }
63         void dispsptsmarks()
64         {
65             cout<<"\nSports marks are:"<<sptsmarks;
66         }

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67
68 };
69 class result:public marks,public sports
70 {
71 private:
72     float per;
73     int total;
74 public:
75     void calculate()
76     {
77         total = common()+returnsptsmarks();
78         per= total/6;
79     }
80     void displayall()
81     {
82         display();
83
84         displaymks();
85         dispsptsmarks();
86         cout<<"\n\nTotal is: \t"<<total;
87         cout<<"\nPercentage is: \t"<<per<<"%"<<endl;
88     }
89 };
90 main()
91 {
92     result t;
93     t.getdata();
94     t.getmarks();
95     t.getsportsmarks();
96     t.calculate();
97     t.displayall();
98 }

```