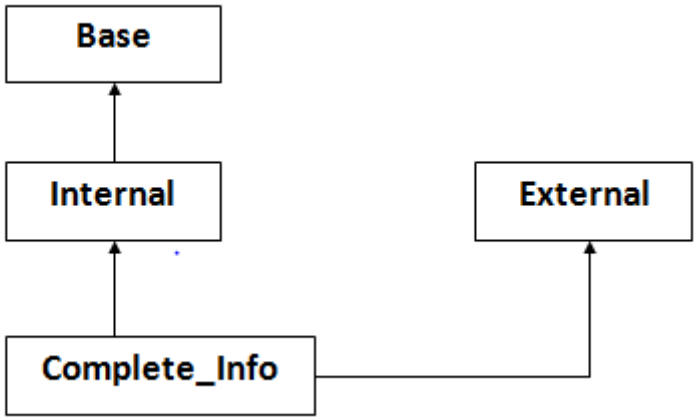
PRACTICE TEST FOR ST-2

35m : 53s
to test end

☆ INHERITANCE

Consider a class named Base having its data members as name and its roll number.A another class named Internal inherits this class in public mode and having its data members as 4 subject marks as internal.Their is an independent class named External having external marks of 4 subjects.The last class named Complete_Info being derived from External and Internal, calculates the total of internal marks obtained by student as well as sum of external marks and grand total.



Generate a code to display the name ,roll_no,sum of internal marks,sum of external marks, grand total and Grade of student. Grade can be calculated using following criteria.

Total Marks	Grade
less than 40	R
41 to 60	C
61 -80	B
81-100	A

For Example
Input:
Raj
1
2
1

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5
5
4
Output:
Raj 1 5 19 24 R

Explanation:
Input Contains
NAME OF THE STUDENT
Raj
ROLL_NO
1
INTERNAL MARKS IN FOUR SUBJECTS
2
1
1
1
EXTERNAL MARKS IN FOUR SUBJECTS
5
5
5
4
Output contains
Name Roll_no Total _internal_ marks Total _external_ marks Total_marks Grade
Note: All elements in output are separated by space

YOUR ANSWER

We recommend you take a quick tour of our editor before you proceed.
The timer will pause up to 90 seconds for the tour. Start tour

Draft saved 10:45 am Original code C++

```
#include ↔

using namespace std;

class Base
```

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```
      int roll;
      void get();
};

class Internal: public Base
{
    public:
    int M1, M2,M3,M4;
    void getIMarks();
     };
class External
{
    public:
    int E1, E2,E3,E4;
    void getEMarks();
};


void Base::get()
            {
    scanf("%s",&name);
            cin>>roll;
        }
 void Internal::getIMarks()
            {
            cin>>M1>>M2>>M3>>M4;
        }
void External::getEMarks()
            {
            cin>>E1>>E2>>E3>>E4;
        }
class Complete_Info:public Internal,public External
    {
    public:
    void get()
        {
        Base::get();
    }
    void getIMarks()
        {
       Internal::getIMarks();
    }
    void getEMarks()
        {
```

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```
58      void Display()
59          {
60          //  cout<<"hello";
61          int sum,sum1;
62          sum=M1+M2+M3+M4;
63          sum1=E1+E2+E3+E4;
64        int total;
65          total=sum+sum1;
66          char  gr;
67          if(total<=100 && total>=81)
68              {
69              gr='A';
70          }
71          if(total<=60 && total>=41)
72              {
73              gr='C';
74          }
75          if(total<=80 && total>=61)
76              {
77              gr='B';
78          }
79          if(total<40)
80              {
81              gr='R';
82          }
83        // printf("%s",name);
84          cout<<" "<<roll<<" "<<sum<<" "<<sum1<<" "<<total<<" "<<gr;
85
86      }
87  };
```

```
88  int main(void)
89  {
90    Complete_Info c;
91    c.get();
92    c.getIMarks();
93    c.getEMarks();
94    c.Display();
95     return 0;
96  }
```

Line: 82 Col: 9

Test against custom input

Run Code

Submit code & Continue

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to edit them on windows.

Status: No test cases passed.

Tip: Debug your code against custom input

Testcase 1: *Wrong Answer*

Input [Download]

```
Raj
1
2
1
1
1
5
5
5
34
```

Your Output

```
 1 5 49 54 C
```

Expected Output [Download]

```
Raj 1 5 49 54 C
```

Testcase 2: *Wrong Answer*

Input [Download]

```
Rohit
1
10
10
10
10
10
20
10
20
```

Your Output

```
 1 40 60 100 A
```

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1

2

3

4

5