

main.cpp



Share

Run

Output

```
1 #include <iostream>
2 using namespace std;
3
4 class Number {
5 public:
6     int value;
7     friend void exchange(Number &a, Number &b);
8
9     void display()
10 {
11     cout << value << endl;
12 }
13 };
14
15 void exchange(Number &a, Number &b)
16 {
17     int temp = a.value;
18     a.value = b.value;
19     b.value = temp;
20 }
21
22 int main()
23 {
24     Number num1, num2;
25
26     cout << "num1: ";
27     cin >> num1.value;
28     cout << "num2: ";
29     cin >> num2.value;
30
31     exchange(num1, num2);
32
33     cout << "\nExchanged:" << endl;
34     cout << "num1: "; num1.display();
35     cout << "num2: "; num2.display();
36
37     return 0;
38 }
```

```
/tmp/vJZNbs9Lqz.o
num1: 51
num2: 12

Exchanged:
num1: 12
num2: 51
```

=== Code Execution Successful ===

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```
1 #include <iostream>
2 using namespace std;
3
4 class Test1 {
5 public:
6     int marksOPP;
7     int marksDSU;
8     int marksDTE;
9     int marksDMS;
10    int total;
11
12    public:
13    void setData(int OPP, int DSU, int DTE, int DMS)
14    {
15        marksDMS = DMS;
16        marksDSU = DSU;
17        marksDTE = DTE;
18        marksOPP = OPP;
19    }
20    friend int test1Total(Test1);
21 };
22
23 int test1Total(Test1 t)
24 {
25     t.total = t.marksOPP + t.marksDSU + t.marksDTE + t.marksDMS;
26     return t.total;
27 }
28
29 class Test2 {
30 public:
31     int marksOPP;
32     int marksDSU;
33     int marksDTE;
34     int marksDMS;
35     int total;
36
37     public:
38     void setData(int OPP, int DSU, int DTE, int DMS)
39     {
40         marksDMS = DMS;
41         marksDSU = DSU;
42         marksDTE = DTE;
43         marksOPP = OPP;
44     }
45     friend int test2Total(Test2);
46 };
47
48 int test2Total(Test2 t)
49 {
50     t.total = t.marksOPP + t.marksDSU + t.marksDTE + t.marksDMS;
51     return t.total;
52 }
53
54 int main ()
55 {
56     Test1 t1;
57     Test2 t2;
58     int average;
59
60     t1.setData(60, 30, 90, 80);
61     t2.setData(70, 60, 30, 70);
62
63     average = (test1Total(t1) + test2Total(t2))/2;
64     cout << "Average = " << average;
65
66     return 0;
67 }
```

```
/tmp/5cjE7N1zv1.o
Average = 255
```

=== Code Execution Successful ===

main.cpp



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Output

```
1 #include <iostream>
2 using namespace std;
3
4 class Calculation {
5 public:
6     double num1;
7     double num2;
8
9     friend void add(Calculation c);
10    friend void subtract(Calculation c);
11    friend void multiply(Calculation c);
12    friend void divide(Calculation c);
13 };
14
15 void add(Calculation c)
16 {
17     cout << "Addition: " << (c.num1 + c.num2) << endl;
18 }
19 void subtract(Calculation c)
20 {
21     cout << "Subtraction: " << (c.num1 - c.num2) << endl;
22 }
23 void multiply(Calculation c)
24 {
25     cout << "Multiplication: " << (c.num1 * c.num2) << endl;
26 }
27 void divide(Calculation c)
28 {
29     cout << "Division: " << (c.num1 / c.num2) << endl;
30 }
31
32 int main()
33 {
34     double a, b;
35     Calculation calc;
36
37     cout << "Num2: ";
38     cin >> a;
39     cout << "Num1: ";
40     cin >> b;
41
42     calc.num1 = a;
43     calc.num2 = b;
44
45     add(calc);
46     subtract(calc);
47     multiply(calc);
48     divide(calc);
49
50     return 0;
51 }
```

/tmp/6z4H08/mcs.o
Num2: 41.8
Num1: 16.54
Addition: 58.34
Subtraction: 25.26
Multiplication: 691.372
Division: 2.52721

=== Code Execution Successful ===