main.cpp

Share Run

Output

```cpp
#include <iostream>
using namespace std;

class Number {
    public:
        int value;
        friend void exchange(Number &a, Number &b);

        void display()
        {
            cout << value << endl;
        }
};

void exchange(Number &a, Number &b)
{
    int temp = a.value;
    a.value = b.value;
    b.value = temp;
}

int main()
{
    Number num1, num2;

    cout << "num1: ";
    cin >> num1.value;
    cout << "num2: ";
    cin >> num2.value;

    exchange(num1, num2);

    cout << "\nExchanged:" << endl;
    cout << "num1: "; num1.display();
    cout << "num2: "; num2.display();

    return 0;
}
```

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

Exchanged:
num1: 12
num2: 51


=== Code Execution Successful ===
```

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Output

```cpp
#include <iostream>
using namespace std;

class Test1 {
    public:
        int marksOPP;
        int marksDSU;
        int marksDTE;
        int marksDMS;
        int total;

    public:
        void setData(int OPP, int DSU, int DTE, int DMS)
        {
            marksDMS = DMS;
            marksDSU = DSU;
            marksDTE = DTE;
            marksOPP = OPP;
        }
        friend int test1Total(Test1);
};

int test1Total(Test1 t)
{
    t.total = t.marksOPP + t.marksDSU + t.marksDTE + t.marksDMS;
    return t.total;
}

class Test2 {};

int test2Total(Test2 t)
{
    t.total = t.marksOPP + t.marksDSU + t.marksDTE + t.marksDMS;
    return t.total;
}

int main ()
{
    Test1 t1;
    Test2 t2;
    int average;

    t1.setData(60, 30, 90, 80);
    t2.setData(70, 60, 50, 70);

    average = (test1Total(t1) + test2Total(t2))/2;
    cout << "Average = " << average;

    return 0;
}
```

```
/tmp/5cjE7Nizv1.o
Average = 255

=== Code Execution Successful ===
```

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```cpp
#include <iostream>
using namespace std;

class Calculation {
    public:
        double num1;
        double num2;

        friend void add(Calculation c);
        friend void subtract(Calculation c);
        friend void multiply(Calculation c);
        friend void divide(Calculation c);
};

void add(Calculation c)
{
    cout << "Addition: " << (c.num1 + c.num2) << endl;
}
void subtract(Calculation c)
{
    cout << "Subtraction: " << (c.num1 - c.num2) << endl;
}
void multiply(Calculation c)
{
    cout << "Multiplication: " << (c.num1 * c.num2) << endl;
}
void divide(Calculation c)
{
    cout << "Division: " << (c.num1 / c.num2) << endl;
}

int main()
{
    double a, b;
    Calculation calc;

    cout << "Num2: ";
    cin >> a;
    cout << "Num1: ";
    cin >> b;

    calc.num1 = a;
    calc.num2 = b;

    add(calc);
    subtract(calc);
    multiply(calc);
    divide(calc);

    return 0;
}
```

Output

```
/tmp/6z4HU9Xmnz.o
Num2: 41.8
Num1: 16.54
Addition: 58.34
Subtraction: 25.26
Multiplication: 691.372
Division: 2.52721


=== Code Execution Successful ===
```