

Answer on Question #46566, Programming, C++

Problem.

write a menu driven program to compare and swap the private data members of two objects from two different class. display the result accordingly.

Solution.

Code

```
#include <iostream>
#include <string>

using namespace std;

class NewData;

class Data {
private:
    string name;
    string date;
public:
    Data(string name, string date) {
        Data::name = name;
        Data::date = date;
    }
    void print() {
        cout << "Name: " << name << endl;
        cout << "Date: " << date << endl;
    }
    friend bool compareData(Data d1, NewData d2);
    friend void swapData(Data &d1, NewData &d2);
};

class NewData {
private:
    string name;
    string date;
public:
    NewData(string name, string date) {
        NewData::name = name;
        NewData::date = date;
    }
    void print() {
        cout << "Name: " << name << endl;
        cout << "Date: " << date << endl;
    }
    friend bool compareData(Data d1, NewData d2);
    friend void swapData(Data &d1, NewData &d2);
};

// Compare Data
bool compareData(Data d1, NewData d2) {
    return (d1.name == d2.name) && (d1.date == d2.date);
}

// Swap data
void swapData(Data &d1, NewData &d2) {
    d1.date.swap(d2.date);
    d1.name.swap(d2.name);
}

int main() {
    Data d1("Name1", "Date1");
    NewData d2("Name2", "Date2");
```

```
// First print
d1.print();
d2.print();

cout << compareData(d1, d2) << endl;
swapData(d1, d2);

// Second print
d1.print();
d2.print();

return 0;
}
```

Result

```
Name: Name1
Date: Date1
Name: Name2
Date: Date2
0
Name: Name2
Date: Date2
Name: Name1
Date: Date1
```