```cpp
#include <iostream>

using namespace std;

class Complex{

    public:
        int r;
        int i;

        void setComplex(int a, int b){
            r = a;
            i = b;
        }
        void printComplex(){
            cout << r << " + " << i << "i" << endl;;
        }

        Complex operator + (Complex c2){
            Complex result;
            result.r = r + c2.r;
            result.i = i + c2.i;
            //result.printComplex();
            return result;
        }

        friend ostream &operator<<(ostream &output,
    Complex &c){
            output << c.r << " + " << c.i << "i";
            return output;
        }

        friend istream &operator>>(istream &input, Complex
    &c){
            input >> c.r >> c.i;
            return input;
        }

        friend Complex multiply(Complex * , Complex *);
};

Complex * multiply(Complex &c1, Complex &c2){
    Complex result;
    result.r = (c1.r * c2.r) - (c1.i * c2.i);
    result.i = (c1.r * c2.i) + (c2.r * c1.i);
    return &result;
}


int main(){
    Complex c;
    c.setComplex(5,4);
    c.printComplex();

    Complex c1;
    cin >> c1;
    cout << c1 << endl;

    Complex c2;
    cin >> c2;
    cout << c2 << endl;

    Complex c3 = c1 + c2;

    cout << c3 << endl;

    Complex c4 = *multiply(c1, c2);
    cout << c4 << endl;
}
```

```
u0_a362@localhost:~$ g++ oop_assignment2.cpp
oop_assignment2.cpp:44:10: warning: address of stack memory associated with local
      variable 'result' returned [-Wreturn-stack-address]
        return &result;
               ^~~~~~~
1 warning generated.
u0_a362@localhost:~$ ./a.out
5 + 4i
6
4
6 + 4i
3
2
3 + 2i
9 + 6i
10 + 24i
u0_a362@localhost:~$
```