#include <iostream>

Using namespace std;

Class complex {

Float x;

Float y;

Public:

Complex() {

X = 0;

Y = 0;

}

Complex operator+(complex);

Complex operator\*(complex);

Friend istream& operator>>(istream& input, complex& t);

Friend ostream& operator<<(ostream& output, const complex& t);

};

Complex complex::operator+(complex c) {

Complex temp;

Temp.x = x + c.x;

Temp.y = y + c.y;

Return temp;

}

Complex complex::operator\*(complex c) {

Complex temp2;

Temp2.x = (x \* c.x) – (y \* c.y);

Temp2.y = (y \* c.x) + (x \* c.y);

Return temp2;

}

Istream& operator>>(istream& input, complex& t) {

Cout << “Enter the real part: “;

Input >> t.x;

Cout << “Enter the imaginary part: “;

Input >> t.y;

Return input;

}

Ostream& operator<<(ostream& output, const complex& t) {

Output << t.x << “+” << t.y << “i\n”;

Return output;

}

Int main() {

Complex c1, c2, c3, c4;

Cout << “Default constructor value:\n”;

Cout << c1;

Cout << “\nEnter the 1st number:\n”;

Cin >> c1;

Cout << “\nEnter the 2nd number:\n”;

Cin >> c2;

C3 = c1 + c2;

C4 = c1 \* c2;

Cout << “\nThe first number is: “;

Cout << c1;

Cout << “\nThe second number is: “;

Cout << c2;

Cout << “\nThe addition is: “;

Cout << c3;

Cout << “\nThe multiplication is: “;

Cout << c4;

Return 0;

}