복소수를 Complex 클래스로 정의한다. 멤버변수는 실수부분(re), 허수부분(im)로 표현하다. 클래스의 함수의 원형을 보고 연산자 중복을 적성한다.

```
#include <iostream>
using namespace std;
class Complex {
private:
        double re, im;
public:
        Complex(double r) { re = r; im = 0; }
        Complex(double r = 0, double i = 0) : re(r), im(i){}
        void Output( ){ cout << re << " + " << im << "i" << endl;
        }
        Complex& operator+=(Complex);
        Complex& operator -();
        friend Complex operator+(Complex&, Complex&);
        friend Complex operator ++ (Complex &);
        friend Complex operator++(Complex &, int);
        friend ostream& operator<<(ostream& os, Complex&);
};
int main() {
        Complex c1(1, 2), c2(3, 4),c(9,200);
        c1.Output();  c2.Output();  c1 += c2;  c1.Output();
        Complex c3 = c1 + c2;
        Complex c4 = c1 += c2, c5, c6;   c3.Output();
        c5 = ++c4; c4.Output();  c5.Output();
        c6 = c4++; c4.Output();  c6.Output();
        c2 = -c2;  cout << c2;  cout << c ;  return 0; }
```

실행결과

```
1 + 2i
3 + 4i
4 + 6i
7 + 10i
8 + 11i
8 + 11i
9 + 12i
8 + 11i
(-3 + -4i)
(9 + 200i)
```