

Object-Oriented Programming (OOP)

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Object-Oriented Programming (OOP)

Global Operator Function

```
1  #include<iostream> |
2  using namespace std;
3
4  class Complex {
5  private:
6      int real, imag;
7  public:
8      Complex(int r = 0, int i =0) {real = r;   imag = i;}
9      void print() { cout << real << " + i" << imag << endl; }
10
11  // The global operator function is made friend of this class so
12  // that it can access private members
13  friend Complex operator + (Complex const &, Complex const &);
```

Global Operator Function

```
19 Complex operator + (Complex const &c1, Complex const &c2)
20 {
21     return Complex(c1.real + c2.real, c1.imag + c2.imag);
22 }
23
24 operator ++(Complex x)
25 {
26 }
27
28 int main()
29 {
30     Complex c1(10, 5), c2(2, 4);
31     Complex c3 = c1 + c2; // An example call to "operator+"
32     c3.print();
33     return 0;
34 }
```


Overload-able Operators

+	-	*	/	%	^
&		~	!	,	=
<	>	<=	>=	++	--
<<	>>	==	!=	&&	
+=	-=	/=	%=	^=	&=
=	*=	<<=	>>=	[]	()
->	->*	new	new []	delete	delete []

Non-overload-able Operators

::	,*	,	?:
----	----	---	----