

Assignment

Practice Questions OOPS I

Write a class *complex* with the following class declaration

```
class complex {
    double re, im;
public:
    //construct complex from 2 scalars/numbers    ---1
    //construct complex from 1 scalar            ---2
    //default complex (0,0)                      ---3
    //add 2 complex numbers
    //subtract two complex numbers
    //check for equality of 2 complex numbers
    //absolute value of a complex number
    //conjugate of a complex number
    //print complex no in the format re + imi
};
```

1. Can 1,2,3 be combined as one function? (*think default args*)
2. Write main function to run/call each method of *complex*.
3. Identify the calling object in each case.
4. Try modifying the program as follows

If the function is

```
complex add(complex);           //stat 1
```

And you called it as

```
comp_no3 = Comp_no1.add(comp_no2);    //stat 2
```

Replace add with **operator+** in stat 1

In Stat 2, it becomes *comp_no3 = comp_no1 + comp_no2;*

5. Does the program still runs? If yes, do it for all operators.
6. Identify the “calling” object and the “called” object? Does the sequence of calling object and called object matters?
7. Try writing the print function using `operator<<`.