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[NPTEL \(https://swayam.gov.in/explorer?ncCode=NPTEL\)](https://swayam.gov.in/explorer?ncCode=NPTEL) » **Programming in C++ (course)**
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Course outline

How does an NPTEL online course work?

Week 0

Week 1

Week 2

Week 3

Week 4

- Module 16 :
Static Members
(Lecture 31)
(unit?
unit=56&lesson=57)
- Module 17 :
Friend Function
and Friend Class
(Lecture 32)
(unit?
unit=56&lesson=58)
- Module 18 :
Overloading
Operator for User
Defined Types:

W4_Programming-Qs2

Due on 2020-10-15, 23:59 IST

Consider the following program and fill in the blanks in **LINE-1** for overloading of multiplication operator, in **LINE-2** and **LINE-3** to calculate multiplication of two complex numbers. Consider sample input and output.

Private Test cases used for evaluation

Input

Expected Output

Actual Output

Status

Test Case 1

1 2 1
2

-3 4

-3 4

Passed

The due date for submitting this assignment has passed.

1 out of 1 tests passed.

You scored 100.0/100.

Assignment submitted on 2020-10-15, 19:08 IST

Your last recorded submission was :

```

1 #include <iostream>
2 using namespace std;
3
4 class Complex {
5     int re, im;
6 public:
7     Complex(int r = 0, int i = 0) : re(r), im(i) { }
8     Complex operator *(const Complex &c) { // LINE-1
9
10         int x, y;
11
12         x = re*(c.re) - im*(c.im);           // LINE-2
13         y = im*(c.re) + (c.im)*re;           // LINE-3
14
15         Complex t1(x, y);
16         return t1;
17     }
18 }
19
20 
```

Part - I (Lecture
33) (unit?
unit=56&lesson=59)

● Module 19 :
Overloading
Operator for User
Defined Types:
Part - II (Lecture
34) (unit?
unit=56&lesson=60)

● Module 20 :
Namespace
(Lecture 35)
(unit?
unit=56&lesson=61)

○ Lecture Materials
(unit?
unit=56&lesson=62)

● Quiz :
Assignment 4
(assessment?
name=136)

● W4_Programming-
Qs1
(/noc20_cs57/progassignment?
name=142)

● **W4_Programming-
Qs2**
(/noc20_cs57/progassignment?
name=143)

● W4_Programming-
Qs3
(/noc20_cs57/progassignment?
name=144)

● W4_Programming-
Qs4
(/noc20_cs57/progassignment?
name=145)

○ Feedback For
Week 4 (unit?
unit=56&lesson=63)

Week 5

Week 6

Week 7

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```

21
22
23     void show() {
24         cout << re << " " << im;
25     }
26 };
27
28 int main() {
29     int x1, x2, y1, y2;
30     cin >> x1 >> y1 >> x2 >> y2;
31
32     Complex c1(x1, y1), c2(x2, y2);
33     Complex c3 = c1 * c2;
34
35     c3.show();
36
37     return 0;
38 }

```

Text Transcripts

**Assignment
Solution**

Books

**Live Interactive
Session**