

S.No: 12	Exp. Name: <b>Write a program to addition, subtraction and multiplication and division of two complex numbers.</b>	Date:2024-08-20
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### Aim:

Take **two complex numbers** as input from the console. For each arithmetic operator(  $+$ ,  $-$ ,  $*$ , and  $/$  ), perform these operations on the two complex numbers and print the result as shown in the example.

### Sample Input and Output:

```
c1: 10+3j
c2: 14+3j
a1 + b2 = (24+6j)
a1 - b2 = (-4+0j)
a1 * b2 = (131+72j)
a1 / b2 = (0.7268292682926829+0.05853658536585366j)
```

### Source Code:

ComplexNums.py

```
a1=complex(input("c1: "))
b2=complex(input("c2: "))
print("a1 + b2 =",a1+b2)
print("a1 - b2 =",a1-b2)
print("a1 * b2 =",a1*b2)
print("a1 / b2 =",a1/b2)
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
c1: 10+3j
c2: 41+3j
a1 + b2 = (51+6j)
a1 - b2 = (-31+0j)
a1 * b2 = (401+153j)
a1 / b2 = (0.24792899408284022+0.055029585798816574j)

Test Case - 2
User Output
c1: 5+10j
c2: 25+15j
a1 + b2 = (30+25j)
a1 - b2 = (-20-5j)
a1 * b2 = (-25+325j)
a1 / b2 = (0.3235294117647059+0.20588235294117646j)