Date:2024-08-17

2023-2027-CST

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) |