Classes: Dealing with Complex Numbers

Problem Statement

For this challenge, you are given two complex numbers and you have to print the result of their addition, subtraction, multiplication, divison and modulus operations.

The precision of both the real and imaginary part should be two digits after decimal.

Input Format

Real and imaginary part of a number separated by space.

Output Format

For two complex numbers C and D, the output should be in the following sequence
C + D
C - D
C * D
C / D
mod(C)
mod(D)

For complex numbers with non-zero real(A) and complex part(B), the output should be in the following format :
A + Bi
Replace the plus symbol (+) with a minus symbol (-) when B < 0

For complex numbers with a zero complex part i.e. real numbers, the output should just be the real number.
For complex numbers where the real part is zero and the complex part(B) is non-zero, the output should be :
Bi

Sample Input

```
2 1
5 6
```

Sample Output

```
7.00 + 7.00i
-3.00 - 5.00i
4.00 + 17.00i
0.26 - 0.11i
2.24
7.81
```

Concept

Python is a fully object-oriented language like C++, Java, etc. For reading about classes, refer here.

Method with double underscore before and after their name are considered as built-in methods i.e. they are used by interpreter and are generally used in implementation of overloaded operators or other built-in functionality.

```
__add__-> Can be overloaded for + operation
```

```
__sub__ -> Can be overloaded for - operation
```

```
__mul__ -> Can be overloaded for * operation
```

For more information on operator overloading in python refer here.