

EXERCISE #3

Create a class called **Complex** for performing arithmetic with complex numbers.

Complex numbers have the form $realPart + imaginaryPart * i$ where i is .

Write an app to test your class. Use floating-point variables to represent the private data of the class.

Provide a constructor that enables an object of this class to be initialized when it's declared.

Provide a parameterless constructor with default values in case no initializers are provided.

Provide public methods that perform the following operations:

- a) Add two Complex numbers: The real parts are added together and the imaginary parts are added together.
- b) Subtract two Complex numbers: The real part of the right operand is subtracted from the real part of the left operand, and the imaginary part of the right operand is subtracted from the imaginary part of the left operand.
- c) Return a string representation of a Complex number in the form (a, b), where a is the real part and b is the imaginary part.