In this exercise we define some classes to start to become familiar with the principle syntax and methods.

**Tasks**

This assignment has ?? tasks.

**Task 1**

Define a class ComplexNumber and write an appropriate `__init__` method.

**Task 2**

Define methods for operations such as addition, subtraction, multiplication, division and power of complex numbers.

**Task 3**

Write a method which returns the complex number’s real part, and one which returns the imaginary part.

**Task 4**

Write a method `is_imaginary` and `is_real` They should return Boolean answers.

**Task 5**

Write a representation method which represents a complex number in the mathematical notation a+ib.

**Task 6**
Write a method which returns the complex number’s argument and absolute value.

Task 7

Write a method which checks if two complex numbers are equal.

Task 8

Write a method which adds a complex number to a float and vice versa.