

Week 7

1. A complex number is a number that can be expressed in the form $a + bi$, where a and b are real numbers and i is the imaginary unit.

Create class Complex with attributes, constructors and getters/setters.

2. Create class Clock and its subclass AlarmClock. Test clocks in main.

There has to be ticking and alarming methods...

3. Bird has features name and amount of eggs.

Amount of eggs has to be between 1 and 10.

Migratory has special features: there is attribute named **country** that is the destination country and **month** when the migration mainly occurs.

Country name has to begin with a cap and its length has to be between 5 to 20. Month has to be between 1 and 12.

Bonus tasks (1 point/task)

1)

Can you find any free UML tools for python?

Tools that can generate python code from class diagrams?

What about reverse engineering?

What about commercial tools?

2)

Create a small app using development phases with UML diagrams:

Requirements -> use cases

Design -> class diagram (2 classes is ok)

Implementation -> code