

Unit 5 Exercise



Data for this exercise :

<https://solarsystem.nasa.gov/solar-system/our-solar-system/overview>

Planets :

The suns orbital objects.

Moons :

The planets orbital objects.

Exercise 1 :

Build an abstract class which represent an orbital object.

I.e. later to be extended to either a planet or a moon. See below.

HINT : Consider what is common for both planets and moons.

Exercise 2 :

Extend the abstract class from Exercise 1 to an Planet Class and make earth an object of this class.

Exercise 3

Build a JUnit 5 test for this earth object, so you are sure :

- It is correct
- The code is covered

Exercise 4

Begin with the test(s) and construct a Moon class with an object called Moon.

I.e. do not write code for the class before the test !

Remember the moon is orbital to the Earth.

And as in Exercise 3 test so the code is covered.

Exercise 5

Write the tests first, and

you should end up with a method, which can tell how many moons a given planet has.

Remember code coverage.

Exercise 6

Write the test first, and

You should end up with a method, which can calculate the distance between to planets.

Remember code coverage.