

Topic: Moving

You are going to move soon and start packing your things in boxes. You decide to write an object-oriented program to keep track of your storage and quickly find your objects.

Every cardboard (box) is enumerated. It is filled with objects (items) and / or other smaller boxes. The contents of a box are all the objects it contains (including those are in smaller boxes).

You will consider:

- that each object has a name
- that a move is a set of boxes

The features you want are:

1. put something (an object or other cardboard (box)) in a box.
2. add a box to the move (the moving project)
3. display the contents of a given box (the name of all its objects)
4. display the contents of all boxes of the move.
5. find the box number where an object with a given name is.
 - 5.1. return only the number of the outermost box.
 - 5.2. return a negative number if the object is not in the boxes.

You are to implement a correct solution which must however be compatible with the main program provided in the Move.java file, but make sure you do not duplicate your code and respect a good encapsulation. To begin, you can draw the schema of the class hierarchy that you imagine, then group the common methods and attributes in the parent classes, and finally, when the hierarchy is clear for you, you can code the program.

It should produce a display that looks like this:

```
The objects of my move are:
scissors
book
compass
scarf
pencils
pens
rubber
The scarf is in the cardboard number 5.
```

Submission:

- Commit your work and push it on GitHub, provide the repo link on Moodle.
- Upload each .java file to the Moodle or send a zip file of your whole work to the Moodle.
 - Make the zip file as your first name and your student id:
 - *FirstName_studentId_FT.zip*

Deductions:

1. Did not follow the provided instruction for submission = -20%
2. Academic dishonesty = 0 marks
3. Late submissions = -10% for every 30 minutes late submission.