

Extension to Your Smalltalk Program

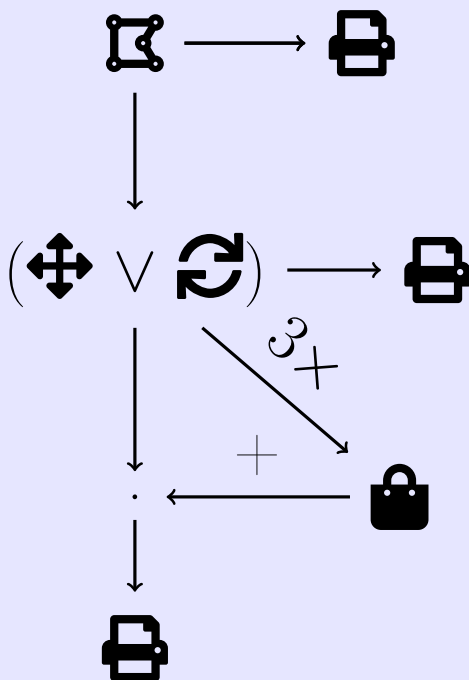
Create a keyword method `addBag:` for the class `Wielokat`. Remember that it must not be a method of your geometric figure, nor of the class `Kwadrat`. The argument is assumed to be an object of the class `Bag`. Such an object holds a collection of other objects in no particular order. It is similar to the class `Set`. However, an object of the class `Set` can hold only a single copy of a particular object. For example, if you add numbers 2, 5, 3, 2, 1, 5, 2, and 3, it will hold only 4 objects: 1, 2, 3, and 5. A `Bag` can hold multiple copies of objects. The class is described in chapter 14 of Hopkins and Horan book (see introduction to Smalltalk slides), section 14.9, page 146, but see sections 14.1 to 14.5 for general methods. It is also described in the tutorial inside VisualWorks.

The method should work as a generalization of the binary method “+”. It should add to the recipient polygon all polygons contained in the argument bag. If a bag contains one figure, the result should be exactly the same as if that figure were the argument of the binary method “+”.

Create a text file that —when copied to the workspace and executed— should test whether the method works correctly. The code should:

1. Create an object of your geometrical figure. Make sure that parameters are not all equal one to another.
2. Print it.
3. Move or rotate it. When moving, make sure that x and y coordinates are different.
4. Print it.
5. Create a bag. Put three copies of your (rotated or moved) figure inside.
6. Send `addBag:` message to your (rotated or moved) figure.
7. Print the result.
8. Do all above points once again, replacing your figure with a square.

Graphically (repeat with your figure and with the square, + means `addBag:`)



Put two files as the task “Smalltalk program to be developed in the lab”:

1. your Smalltalk program in the XML format (`Package/File out/Package...`)
2. your testing code as pure text (use `txt` extension)