

[301] Using Functions

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Learning Objectives Today

Learn how to use functions:

- Calling functions
- Passing arguments
- Getting values back

Modules:

- What are they?
- How to import them?
- Attribute operator

Inspection:

- How to discover the functions in a module
- How to learn what a function is meant to do

**Please read Chapter 3
of Think Python**

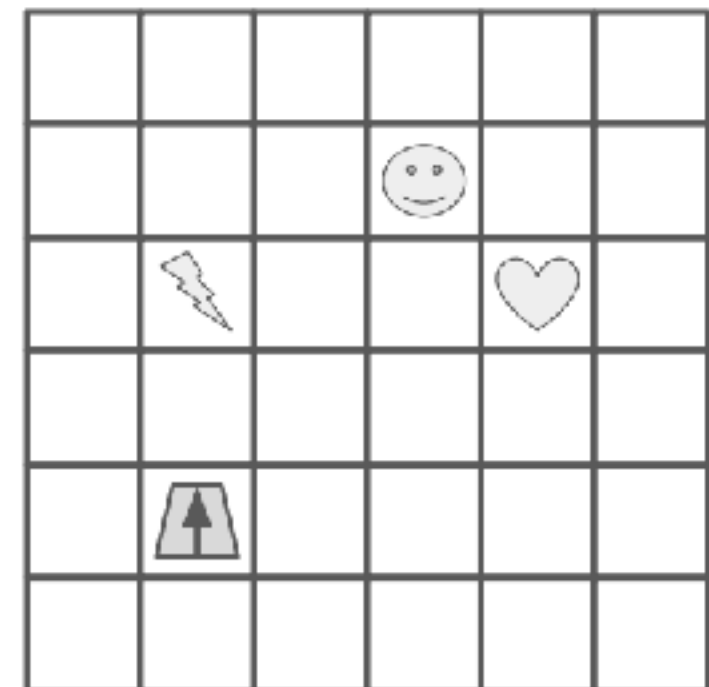
Main Code:

1. Put 2 in the “moves” box
2. Perform the steps under “Move Code”, then continue to step 3
3. Rotate the robot 90 degrees to the right (so arrow points to right)
4. Put 3 in the “moves” box
5. Perform the steps under “Move Code”, then continue to step 6
6. Whatever symbol the robot is sitting on, write that symbol in the “resut” box

Move Code:

- A. If “moves” is 0, stop performing these steps in “Move Code”, and go back to where you last were in “Main Code” to complete more steps
- B. Move the robot forward one square, in the direction the arrow is pointing
- C. Decrease the value in “moves” by one
- D. Go back to step A

**Functions are like “mini programs”,
as in our robot worksheet problem**



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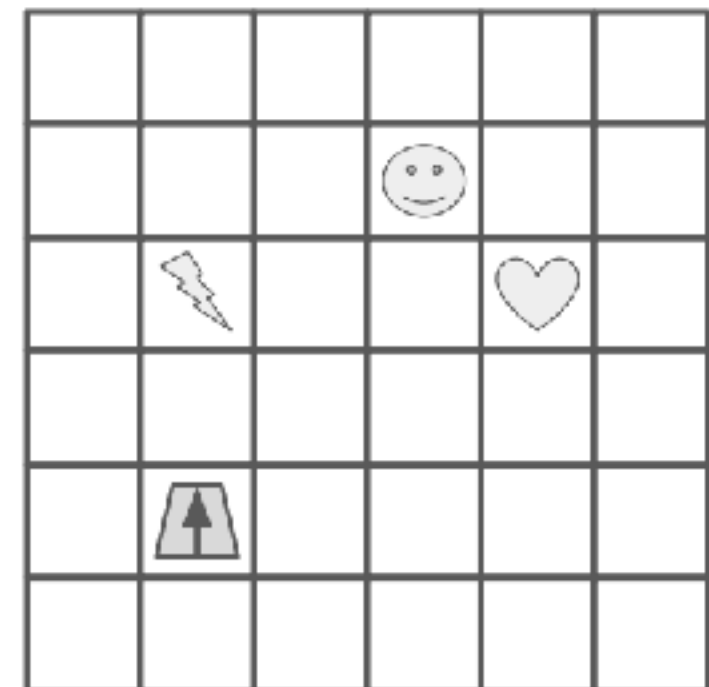
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“Move Code” is a function

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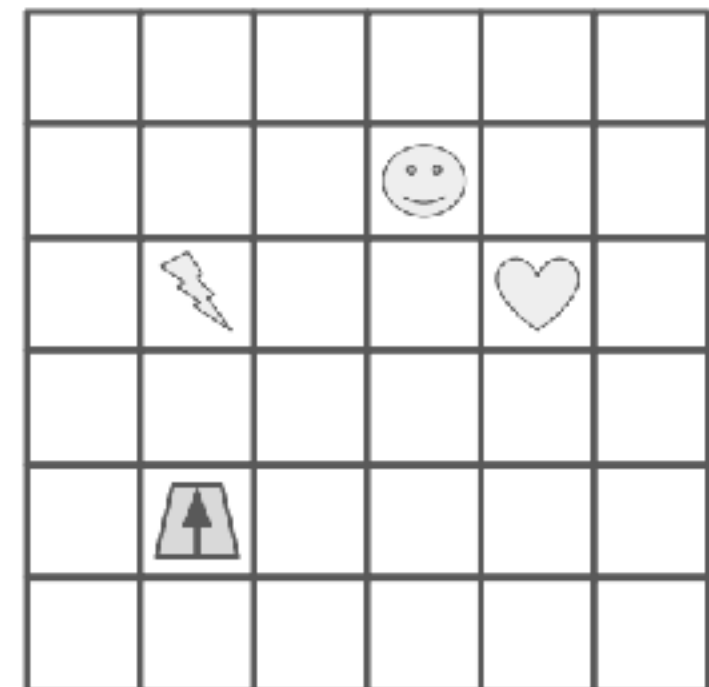
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input with "arguments" like "moves"*

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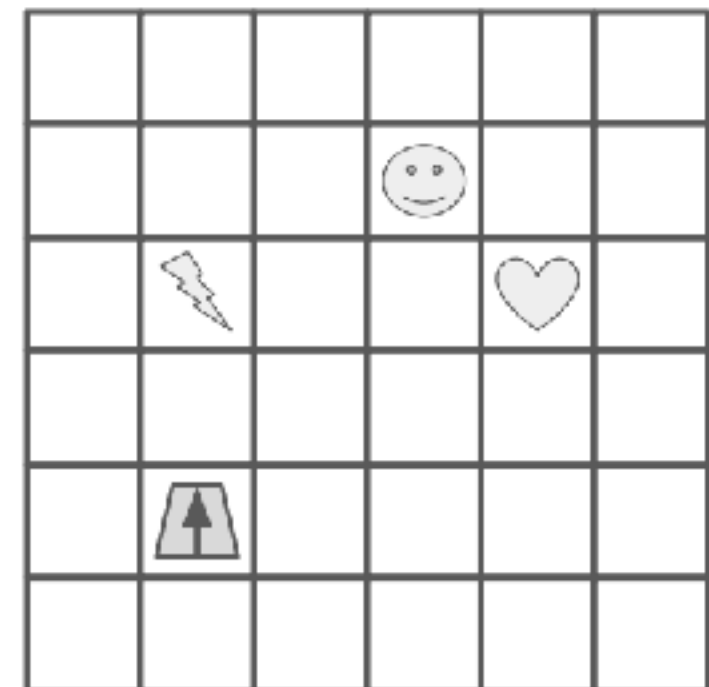
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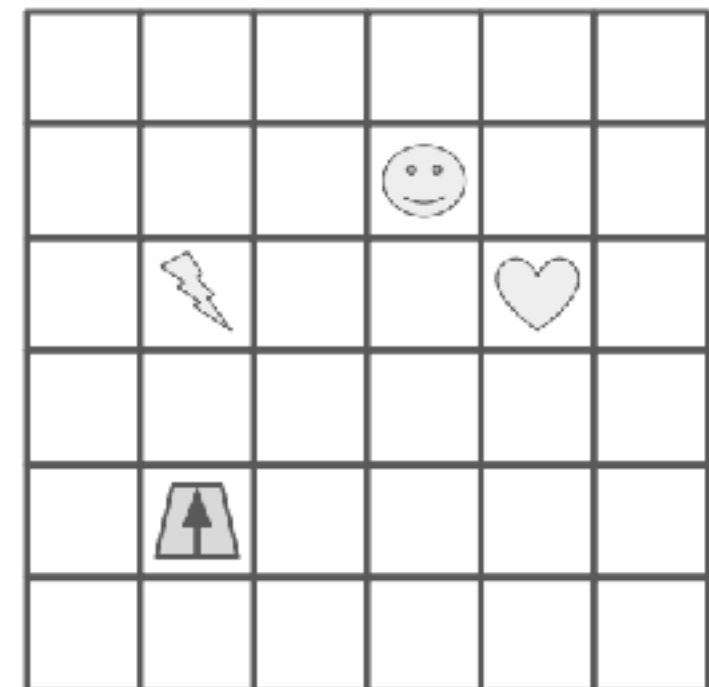
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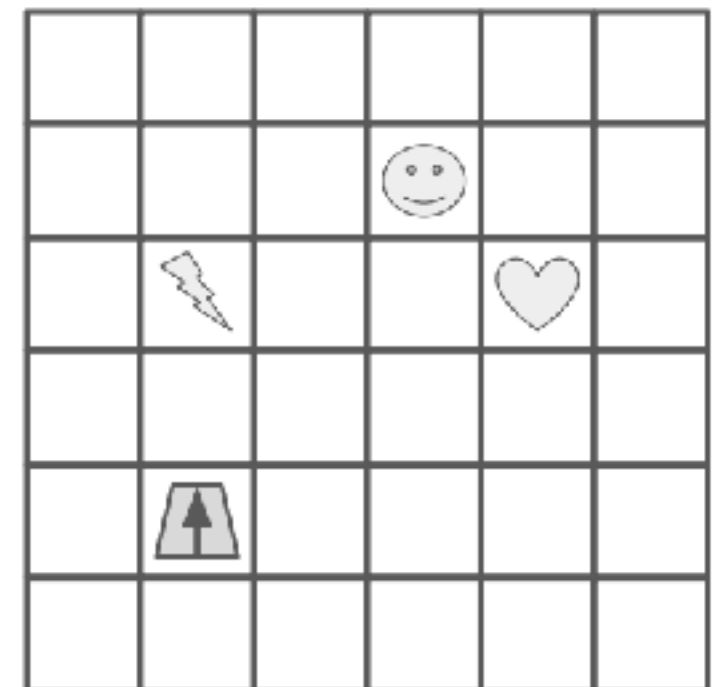
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*next lecture, we'll learn how to
write our own new functions*

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demos for rest of lecture