

Prog NLP

Week 1 Lab

Install a VS code extension called Python

Reference guide:

http://web.stanford.edu/class/archive/cs/cs106ap.1198/handouts/h7_Karel_Reference_Guide.pdf

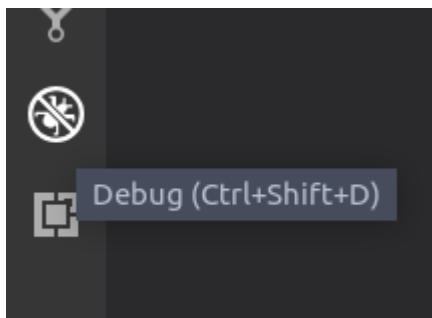
Starter code:

<https://drive.google.com/file/d/1NWfmJyIEdji66IR2NRzIUVAAtXTZMOM-5/view?usp=sharing>

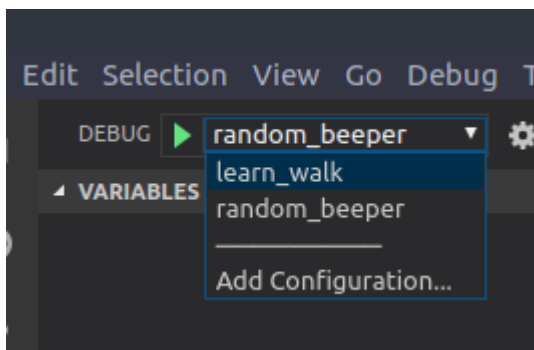
Instructions for running the programs:

Make sure you open `week1_lab` as your workspace directory (via File->Open Folder), not just the code files

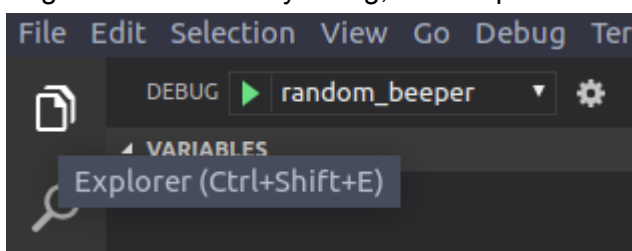
To run your program, go to Debug



Choose either “learn_walk” (1. below) or “random_beeper” (2. below) and click the Play button

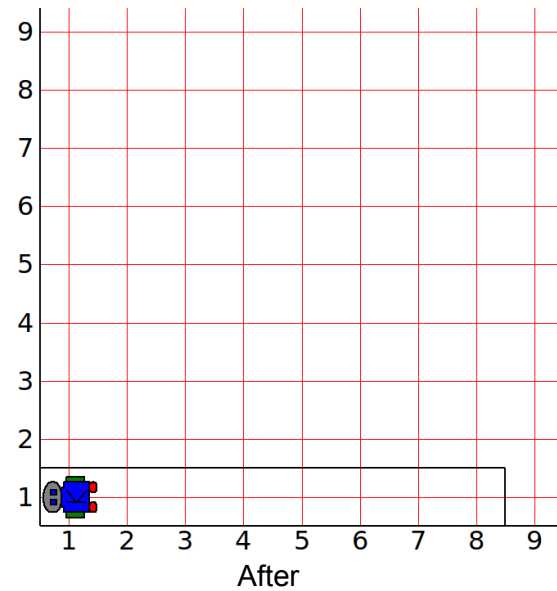
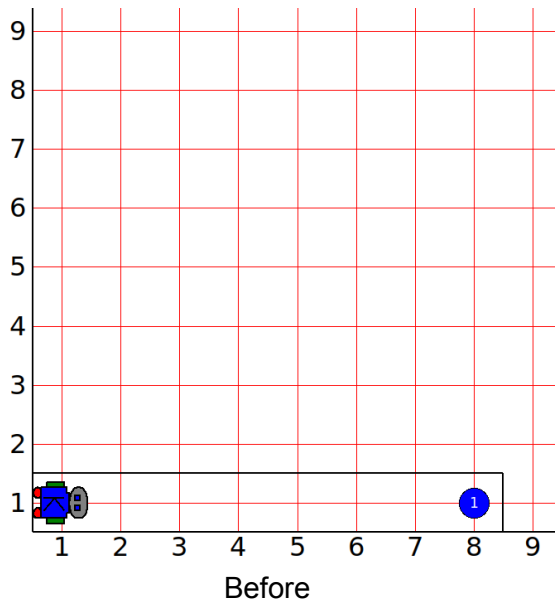


To go back to directory listing, click Explorer



1. Karel is trying to learn to walk. She likes blue. To motivate her learning, her parents put a blue toy at a 7-block distance from her (indicated by a blue circle with the number 1 in it; this is called a **beeper**). Help Karel walk by making her move and pick up the blue toy.

In `Karel_learn_walk.py`, write a program that makes Karel move 7 block to the right and pick up the toy (the blue beeper) and come back to the starting point



2. Once she has learned how to walk, Karel just keeps walking and walking without caring about anything else in the world. Unfortunately, her carelessness leads to a difficult situation. She drops her toys along the way. Her parents tell her to take some responsibility and pick up the toys she has dropped. Help Karen pick up her toys.

When the program has launched and you click Run, **Karel will drop her toys exactly two times, one toy per drop.** as she walks to the east end of the room. **The dropping is random:** we don't know beforehand where she will drop the toys.

In Karel_random_beeper.py, write more code so that after walking all the way to the right, Karel moves back to the starting point, picking up the two toys she's dropped earlier along the way.

* Your program should work wherever Karel happens to drop the toys, because each time the program is run she will drop at them different places. Use the *while*-loop to help you with this task.

Before: <https://youtu.be/Q4e7xfVV7fg>

After: <https://youtu.be/RjbvoVBzCRc>