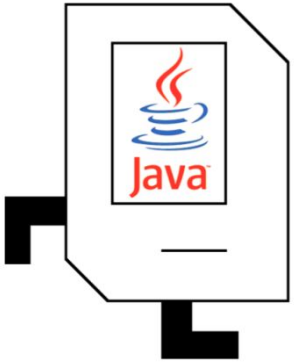
Karel the Robot Learns Java



Jack Beasley
Colleen Dai
George Younger

Welcome!

Class Logistics

- Class materials @ github.com/mahackers
- If you have not created a GitHub, do so @ github.com/join
  - Inform Jack of GitHub username so we can add you to the organization
- Join the Facebook group
  - Go to tinyurl.com/hackerfb
  - Class news will be announced here

Karel the Robot

Karel is a very simple robot living in a very simple world.

- **By giving Karel a set of commands, you can direct it to perform certain tasks within its world.**
- You can program Karel to execute these commands
- The programs you write must obey a set of syntactic rules

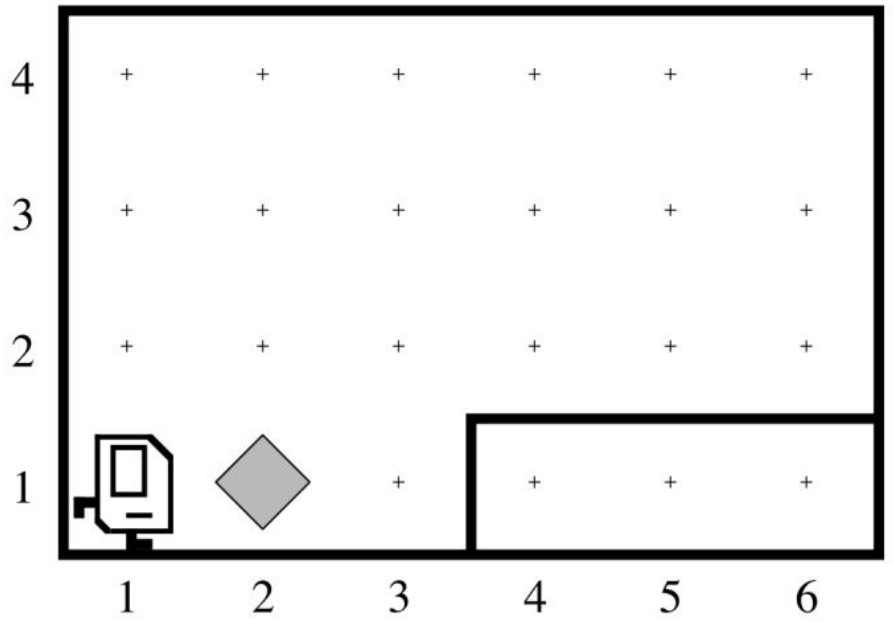
•These define what commands and language forms are legal

•The predefined commands and syntactic rules define **the Karel programming language**

Karel's World

Karel's world is defined by streets running horizontally (east-west) and avenues running vertically (north-south).

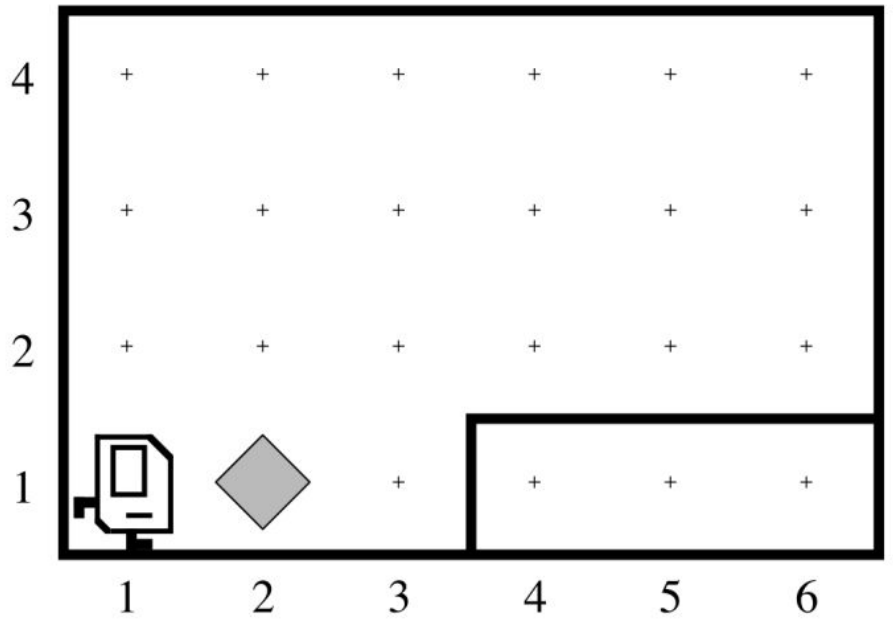
- The diamonds are called "beepers"
- Karel can hold beepers
- Karel can only process a few commands
- What commands?



Karel's Moves

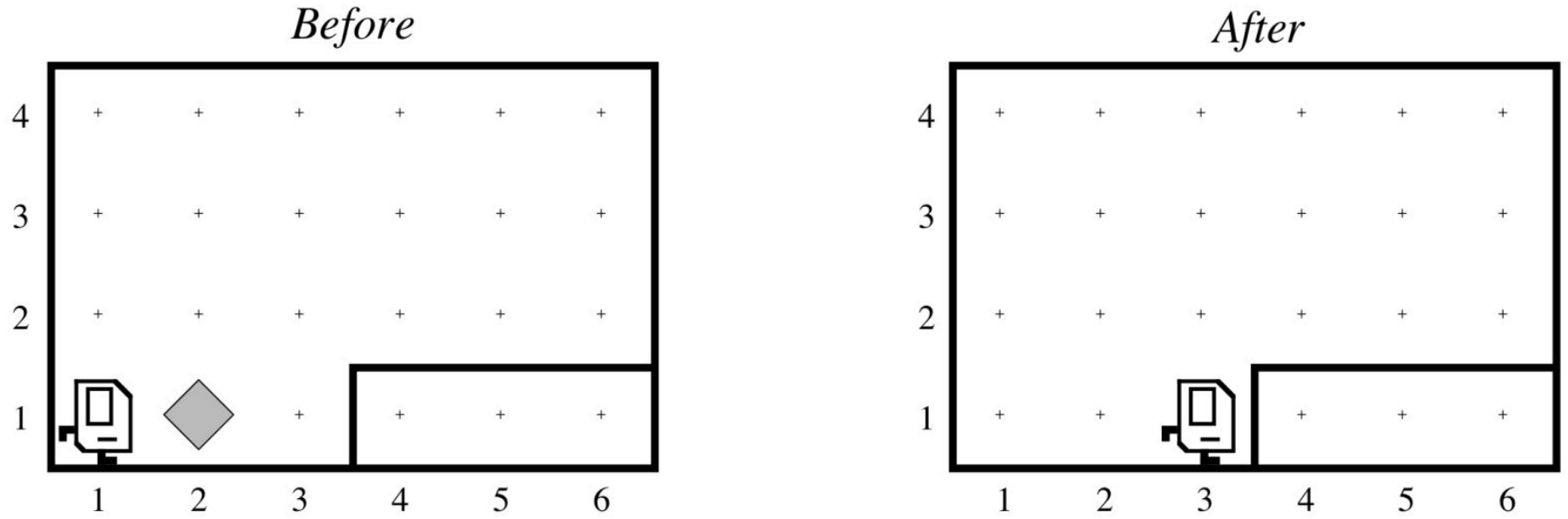
These are Karel's basic commands

- Karel can:
- move
- turnLeft
- pickBeeper
- putBeeper



Karel Example 1

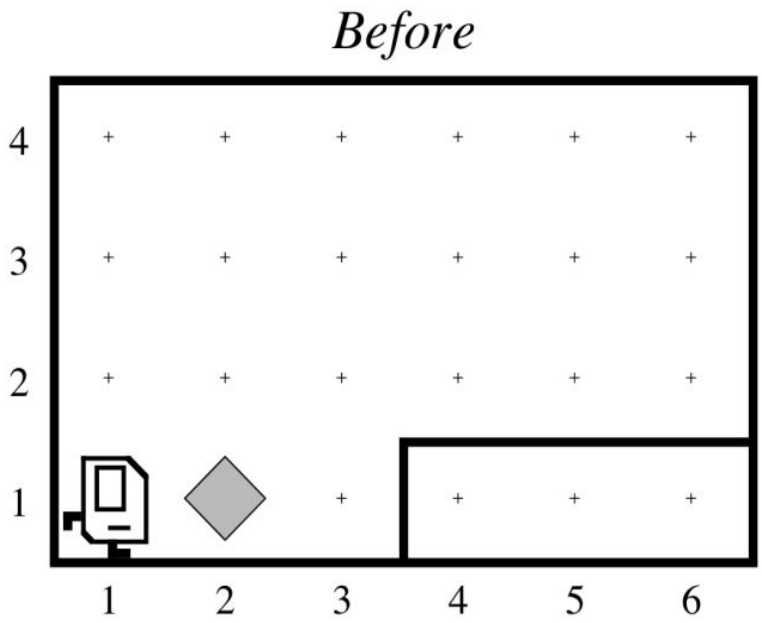
Trying out Karel

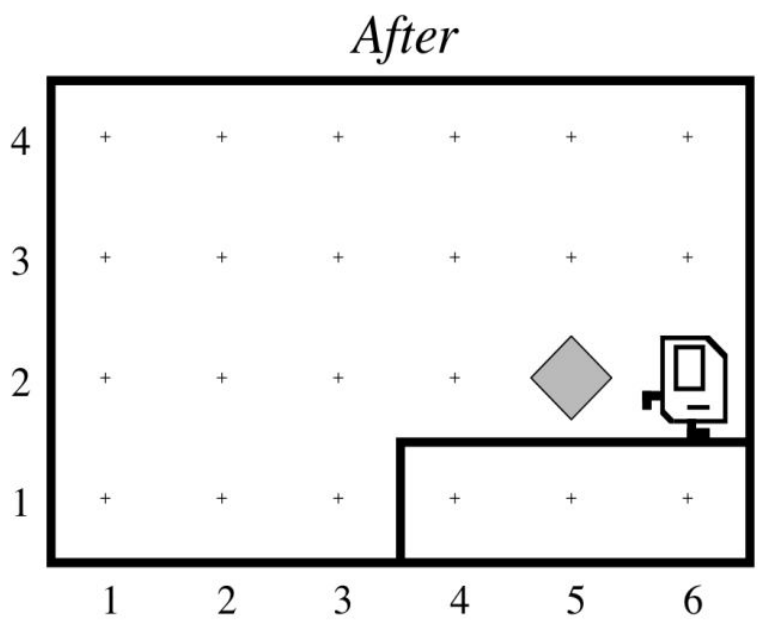


- How can we tell Karel to transform the first image into the next?

Karel Example 2

Trying out Karel





- How can we tell Karel to transform the first image into the next?

On to the Assignments!

Go to the MA Hackers Github