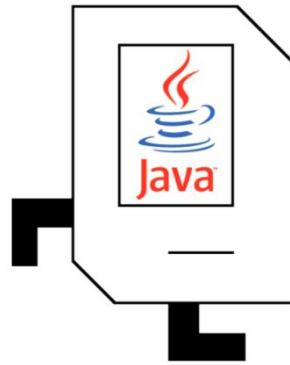# Karel the Robot Learns Java

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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

- Get on Remind!

  - Go to remind.com/join/mahackers

  - We will send out news using this

Introduction to Unix

Unix is an operating system (like Windows/Mac) first developed in the 1960s.

- **Unix is controlled using a few basic commands:**
- ls (list all directories)
- cd (change directory, similar to clicking a file in Windows/Mac)
- cat (reads file sequentially)

- **Execute these commands:**

  $ cd Documents

  ~/Documents $ gedit test.txt

  ~/Documents $ ls

  test.txt

  ~/Documents $ cat test.txt

  Hello

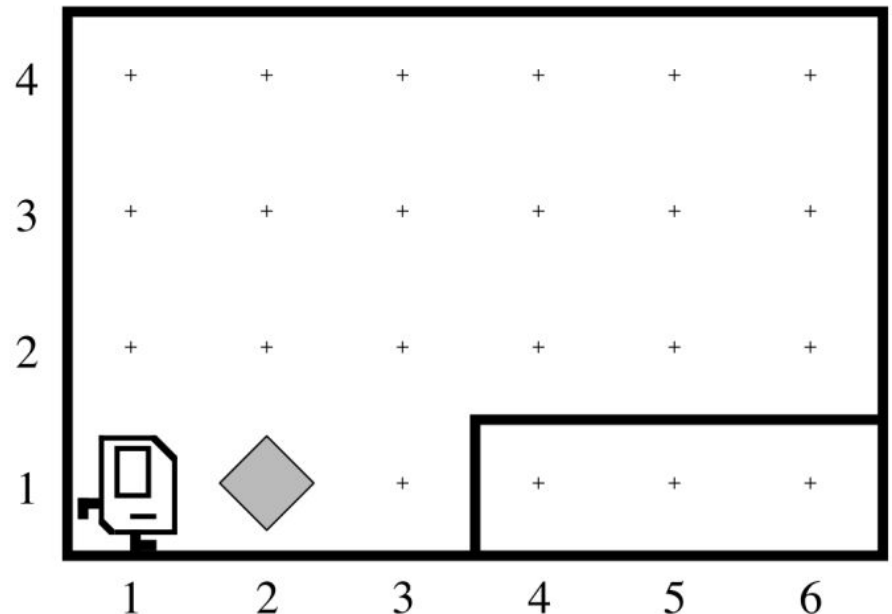# SSH

Command is ./sshsetup.sh

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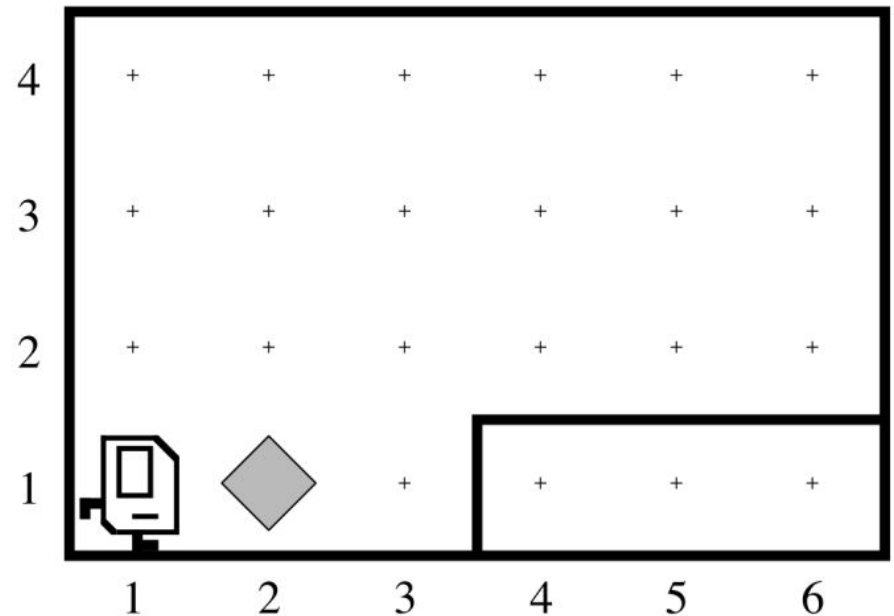
- The diamonds are called "beepers"
- Karel can hold beepers
- Karel can only process a few commands
- What commands?

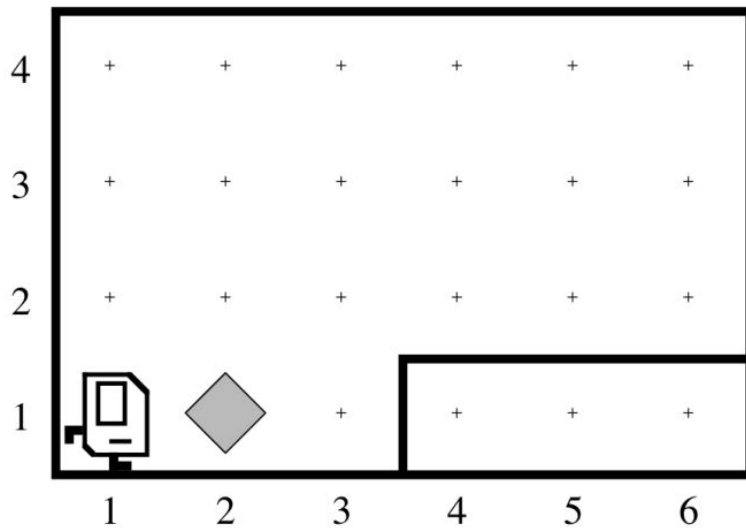# Karel's Moves

These are Karel's basic commands

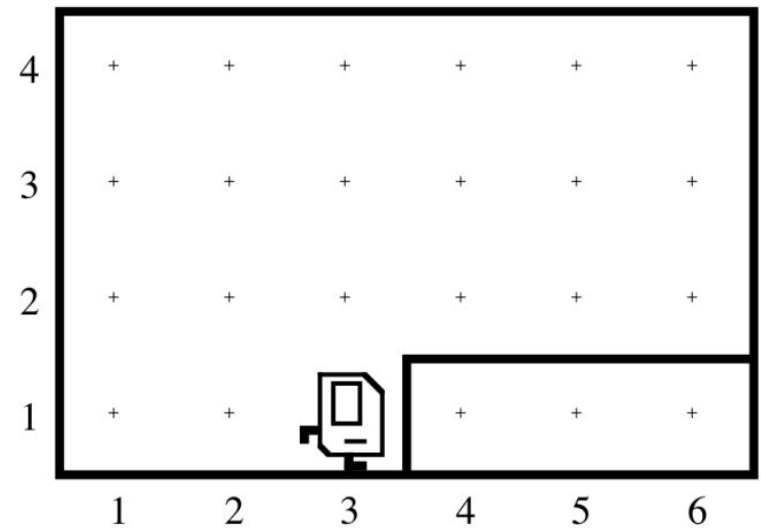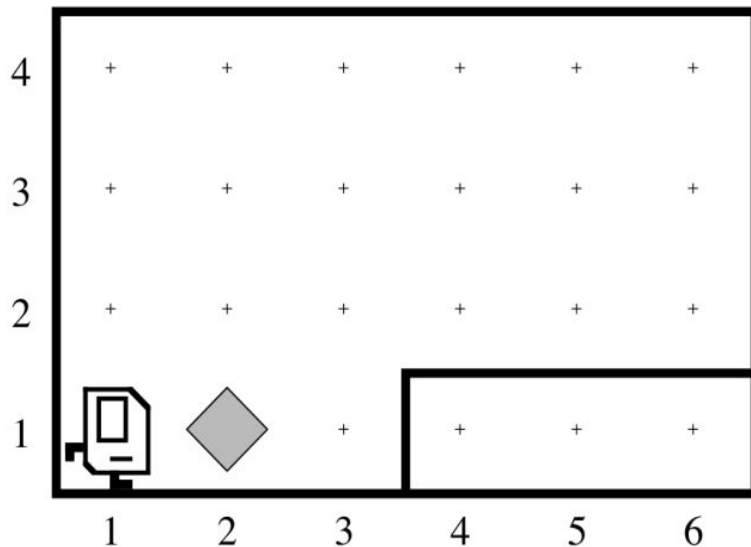- Karel can:
- move
- turnLeft
- pickBeeper
- putBeeper

Trying out Karel

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

Trying out Karel
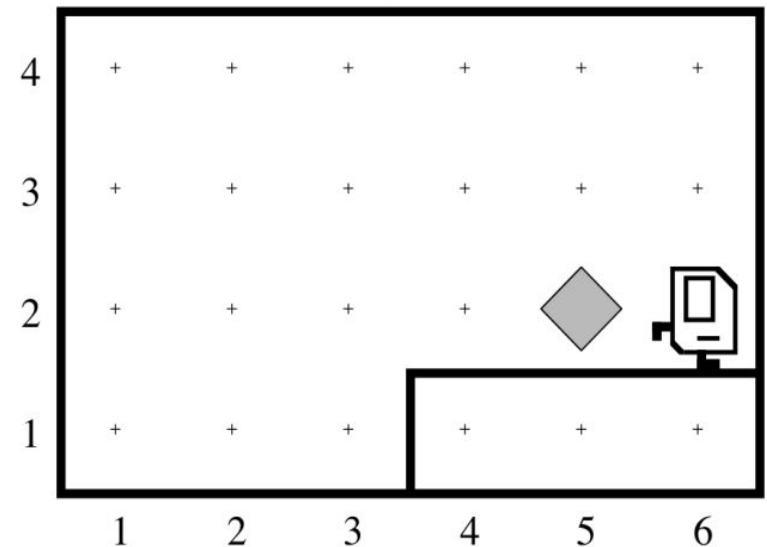

- How can we tell Karel to transform the first image into the next?

Go to the MA Hackers Github