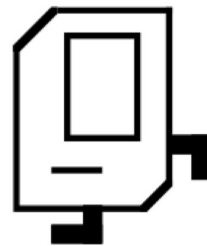


Code in Place



Section 2: Art of Karel
Week 2: May 5th, 2023

Agenda

1. Check-in: how are we all doing?
 2. *Optional: concept review*
 3. Section Problem: a fun and engaging Karel problem
 4. *Bonus Problems: expanding on Karel and diving into the console*
-

Before starting

- How are you all doing!? Hopefully your first week of Code in Place went well!
- To start off, let's do a quick check-in question.
- Choose one of the following to answer:
 - What's one thing you have enjoyed or found fun about Code in Place so far?
 - What has been your favorite problem to work on so far?
 - What are you looking forward to using Python/Coding for?

Concept Review Questions

Are the 3 concepts below all clear? Any questions?

- Decomposition
- While vs. For Loop
- If Statements

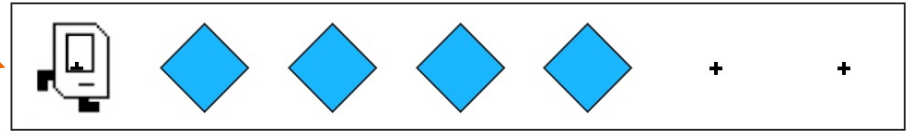
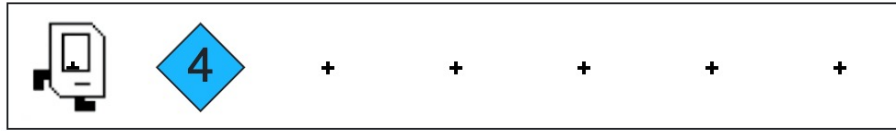
Let's get practice some more challenging Karel problems...

Karel – Spread Beepers Problem



Spread Beepers

Start: We have a number of beepers which are stacked in a single pile.

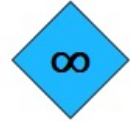


Goal: We want to take these beepers and spread them out across the row.

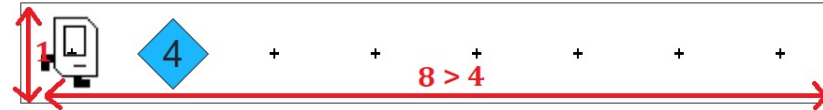
Notice how there are still only 4 beepers in the world!!!

Key Problem Details

● Beepers: The “catch” to this problem? Karel has infinite beepers in its bag.



● World attributes: There is only one row in the world. The world is wide enough for all of the beepers.



● Location: The pile of beepers is on the second column (in front of where Karel starts).



Bonus Problems

Karel – Spread Beepers Problem over multiple rows

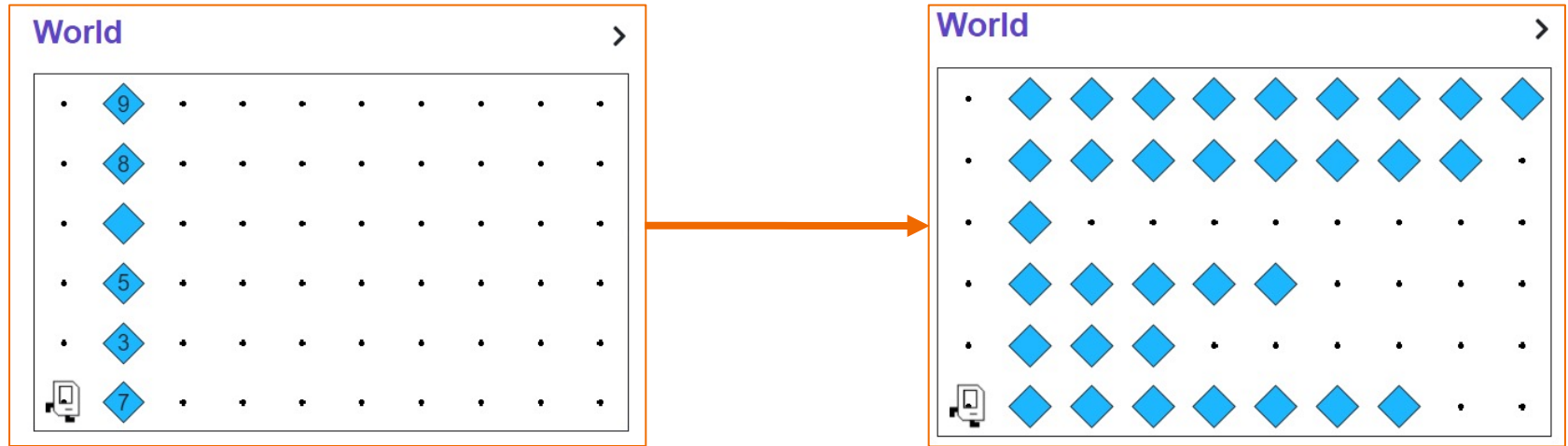
Console programming



Bonus 1: Adding more rows

Problem: We have multiple rows with piles of beepers now!

Goal: We want to spread all of the rows!



Bonus 2: Duplicating input messages

Sample input: Enter any message you'd like:

Enter any message you'd like: ***coding rocks!***

Sample Output:

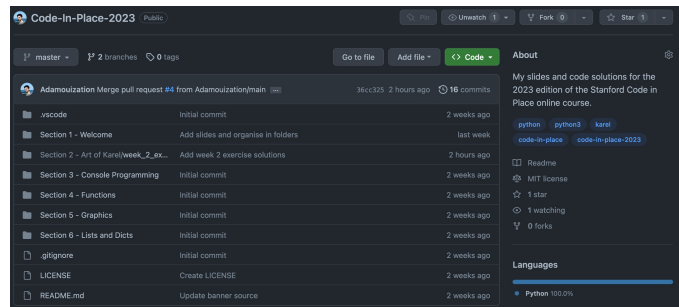
coding rocks!
coding rocks!
coding rocks!
coding rocks!
coding rocks!
coding rocks!
coding rocks!
coding rocks!
coding rocks!
coding rocks!

* User input is italicized and bolded *

Wrap Up Announcements

Posts	
Filter by tags	▼
Do we need to try section task... ✓	
Valeriy O	
Check this out, Karel can talk!	
Batorgil	
Karel's madness or Karel 1:0 ...	
Valeriy O	
Lesson 1 Reflections	
Faatihah	
Week 2 Coding Exercises Help?	
Adam Jaamour SL	
Section 1 slides + code	
Adam Jaamour SL	
I was in another camp, Adam!	
Valeriy O	
Hospital problem ✓	
Batorgil	

- Section forum: Thanks to all of you for participating in forum to share reflections, questions, show code and socialize 😊
- Visit my solutions to exercises on GitHub:
- Try the extra exercises and share your code!
- Something I did well, something I can do better?



 STUDENT

 CODE

 LEARN

 FORUM

See you next week!

And on the forum

— Section 2: Art of Karel —

Next in Section 3: Console programming
