

EV3 LESSONS



Loops

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BEGINNER PROGRAMMING LESSONS

LESSON OBJECTIVES

1. **Learn how to repeat an action**
2. **Learn how to use Loop Blocks**

REPEATING AN ACTION

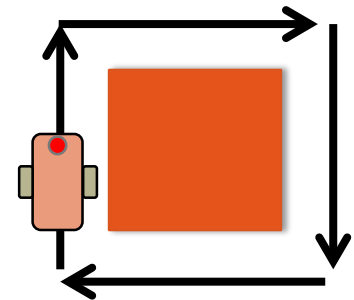
Let's say we want the robot to repeat an action over and over again.

Would you just copy the block multiple times?

- Sure, that could work!

What if I want to repeat that block forever?

- Now what?



LOOPS

- Loops make repeating a task multiple times easy
- The added benefit is that a loop can end whenever you want (a specific number of times, run forever, a specific condition, etc.)
- Loop blocks can be found in the Control tab

Control

wait 1 seconds

wait until

repeat 10

forever

repeat until

if then

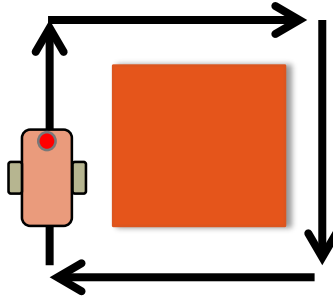
if then
else

stop other stacks

stop and exit program

LOOP CHALLENGE

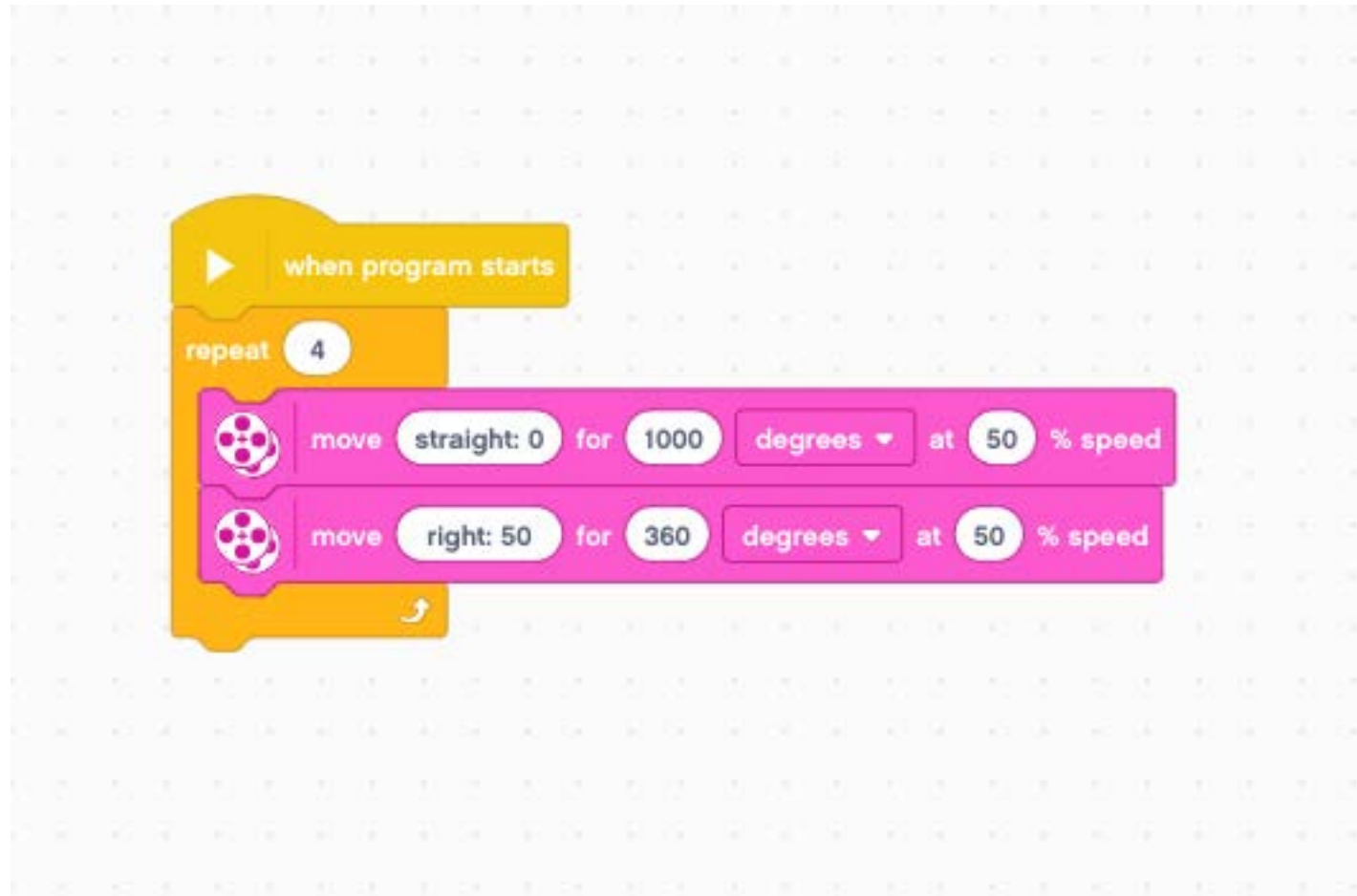
Challenge: Write a program to go around a box once.



The inefficient way is to code it like this:



USE A LOOP TO IMPROVE THE CODE



CREDITS

- This tutorial was created by Sanjay Seshan and Arvind Seshan
- More lessons are available at www.ev3lessons.com



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