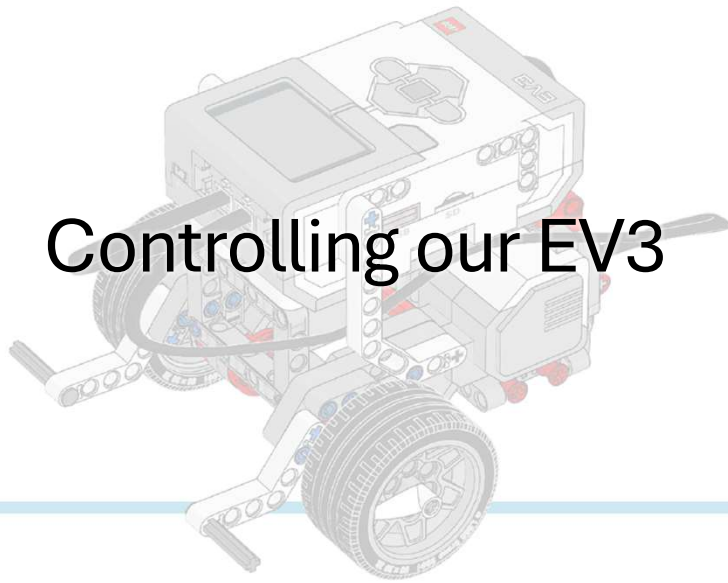


Controlling our EV3



1

Wiring Devices

- Sensors plug into 1,2,3,4
- Motors plug into A,B,C,D



2

“Movement” vs. “Motors” Commands

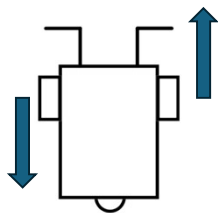
Magenta **movement** commands talk to both motors
 Blue **motors** commands talk to one individual motor



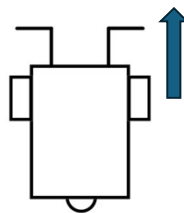
3

TURNING

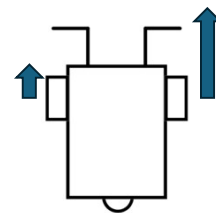
Spin



Pivot



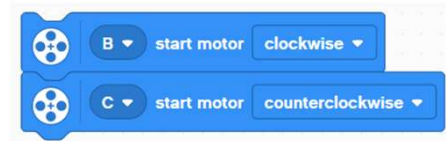
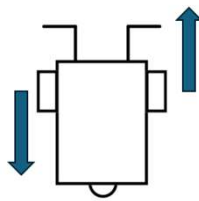
Curve



4

TURNING: SPIN

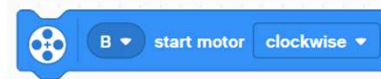
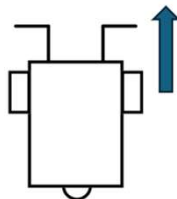
- One wheel driving forward
- One wheel driving backward
- “Tank Style”
- Fastest way to turn
- Least accurate



5

TURNING: PIVOT

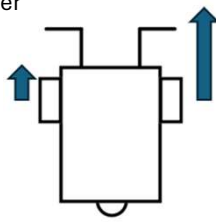
- One wheel driving forward
- One wheel stopped
- Most consistent and accurate



6

TURNING: CURVE

- Both wheels moving forward
- One wheel faster than the other
- Gentlest turning
- Hard to be consistent



move for 400 degrees at 25 100 % speed

B start motor at 100 % speed
C start motor at 25 % speed

7

Simplest Approach?

move forward for 2 seconds
move for 1 seconds at 50 30 % speed

move for 1 seconds at 50 30 % speed

Curve Right

move for 1 seconds at 0 30 % speed

Pivot Left

move for 1 seconds at 15 -15 % speed

Spin Right

8

Driving Missions for Today

- Start here
 - Drive forward 3 tiles
 - Drive forward 3 tiles and reverse back to start
 - Drive a square (using a “repeat” loop!)
- Drive a square three times, each time using a different turn at the corners (once using spin, once using pivot, once using curve)
- Done all those? There is a maze!