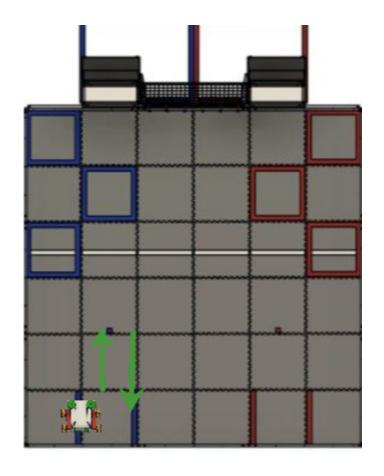


## VRS Blocks Forward Backward-and adjust the # of motors

# Goal: Autonomously drive the Robot Forward and Back in a straight line



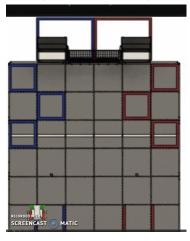
https://www.moovly.com

What your code will look like when you drive the robot <a href="https://youtu.be/pT2M3yyGTpU">https://youtu.be/pT2M3yyGTpU</a>

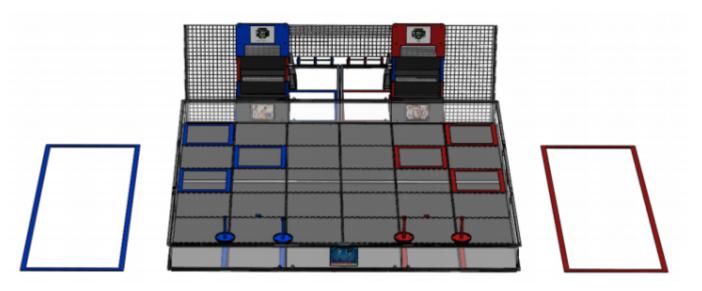
pseudocode-write the steps out







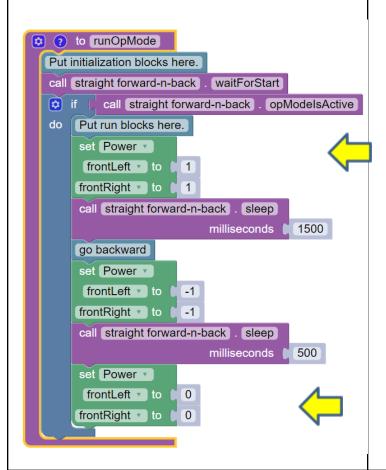
make into gif <a href="https://imgflip.com/gif-maker">https://imgflip.com/gif-maker</a>







## Step 1-Start with Forward Backward Code



Robot moves forward

Robot pauses for 1.5 seconds

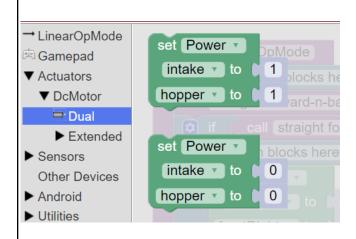
Robot goes backwards

Robot Stops-turn off Motors\





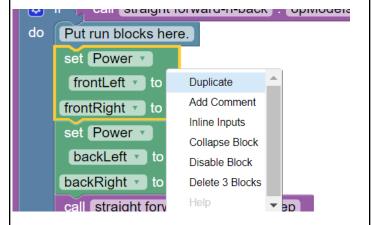
### Add 2 more Motors



there are 2 ways to add the next Motors

Go to actuator, DC motor, Dual

Choose the set power block



#### **OR**

click on the set power front left front right and right click on duplicate.

then change the Motors to back left back right

Set the power to one

Save the program -test program in the simulation.





Test the program in the simulation ---make any adjustments

```
call straight forward-n-back . opModelsActive
do Put run blocks here.
    set Power •
     frontLeft v to
    frontRight v to
    set Power
     backLeft to 1
    backRight • to [1
    call straight forward-n-back . sleep
                         milliseconds
                                       1500
    go backward
    set Power •
     frontLeft • to
    frontRight v to
    set Power •
     backLeft v to
    backRight ▼ to (
    call straight forward-n-back . sleep
                          milliseconds 500
    set Power •
     frontLeft • to 0
    frontRight v to
    set Power •
     backLeft to
    backRight ▼ to
```

How have things changed?

