**Myro Documentation (not a cheat sheet)**

*(****all*** *programmers look things up)*

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| **from Myro import \***  This is the line of code you use at the top of every file to enable use of all robot commands. |
| **init(PATH) / init(“sim”)**  Use this command to start talking to your robot. If you are using real robot, input your path here. If you are using the simulated robot input “sim” instead. |
| **forward(SPEED, SECONDS)**  where **SPEED** is a number between 0.0 and 1 (1 being the fastest) and  **SECONDS** is the amount of time the robot will move forward at said speed.   |  | | --- | | forward(.1, 2) #=> Move forward at 10% speed for 2 seconds  forward(.5, 1) #=> Move forward at 50% speed for 1 second  forward(1, 3) #=> Move forward at 100% speed for 3 seconds | |
| **backward(SPEED, SECONDS)**  where **SPEED** is a number between 0.0 and 1 (1 being the fastest) and  **SECONDS** is the amount of time the robot will move forward at said speed.   |  | | --- | | backward(.1, 2) #=> Move backward at 10% speed for 2 seconds  backward(.5, 1) #=> Move backward at 50% speed for 1 second  backward(1, 3) #=> Move backward at 100% speed for 3 seconds | |
| **turnBy(DEGREES, “deg”)**  where **DEGREES** is a number degrees the robot will turn  if the **DEGREES** is **Positive**, the robot will spin **Clockwise**  if the **DEGREES** is **Negative**, the robot will spin **Counter-Clockwise**   |  | | --- | | turnBy(90, “deg”) #=> Turn 90° clockwise  turnBy(-45, “deg”) #=> Turn 45° counter-clockwise | |
| **wait(SECONDS)**  where **SECONDS** is a number of seconds the robot will wait and do nothing   |  | | --- | | wait(1) #=> Wait for 1 second  wait(60) #=> Wait for 60 seconds | |
| **stop()**  Stops the robot, regardless of what it is doing. This will rarely be used.   |  | | --- | | stop() #=> Stops the robot no matter what it's doing | |
| **motors(LEFT\_POWER, RIGHT\_POWER, SECONDS)**  Manually control the power of the robot's motors:  **LEFT\_POWER** is a number between -1 and 1 that controls the **Left** wheel  **RIGHT\_POWER** is a number between -1 and 1 that controls the **Right** wheel  Any power number between -1 and 0 will spin the wheel forwards (where -1 is the most powerful backwards spin)  Any power number between 0 and 1 will spin the wheel backwards (where 1 is the most powerful spin forwards)  **SECONDS** is the amount of time the robot will move at the said powers.   |  | | --- | | motors(-1, 1, 2) #=> Spin at top speed for 2 seconds  motors(.5, 0, 1) #=> Move left wheel at 50% speed for 1 second  motors(0,.5, 3) #=> Move right wheel at 50% speed for 3 seconds | |
| **pic = takePicture()**  Takes a picture and saves it into the variable pic.  **show(pic)**  Will show the picture in a new window.  pic = takePicture() => takes the picture but does not show it  show(pic) #=> shows the picture |
| **penDown()**  Note: This only works in the simulator. If you are connected to a real, live actual Robot, you’ll need to put the pen in yourself!  Puts a pen in the simulated robot. |
| **penUp()**  Note: This only works in the simulator. If you are connected to a real, live actual Robot, you’ll need to pick the pen up yourself!  Picks the pen up in the simulated robot. |