

Group Muenster.

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Prep Meeting 1: Before your prep meeting, please review the sample code (see Section 4.1).

Then

think about how you might implement the Motor object code (see Section 4.3) and the main code (for Sections 4.4-4.6).

- Motor object code:
 - `__init__` parameters
 - Parameters:
 - `pin_legA`, `pin_legB`
 - Left or right motor
 - Relative power calibration (in case one motor is stronger than the other)
 - Prepare the PWM range
 - prepare PWM frequency
 - clear all pins
 - `set_level` method
 - Params:
 - Level
 - Uses `io.set_PWM_dutycycle` to set power for a single motor, will compensate based on differing gear ratios/powers (part of the motor object)
 - stop method
- Main code:
 - Initialize two Motor objects - left and right motor
 - Using the motor object's `setlevel` methods, Loop four times: move forward 1 meter, then turn 90 degrees
 - How to get it to move forward 1 meter exactly:
 - Trial and error: try different PWN levels and different times
 - How to get it to turn 90 degrees exactly:
 - Also trial and error: try different PWN levels for one of the legs for different times, while stopping the other leg. Will calibrate this so that we can turn either direction based on an input angle
 - Helper function with set angle - which will do exactly what is described in the above bullet
 - Once down with square, will stop both motors