

```
1  from DRV8833 import *
2  from Encoder import *
3
4  class MotorController:
5
6      def __init__(self, motor, encoder):
7          '''Controller for a single motor
8             motor: motor driver (DRV8833)
9             encoder: motor encoder (Encoder)
10          '''
11          self.mot = motor
12          self.end = encoder
13
14      def p_control(self, desired_cps, P=1):
15          '''Set motor control to rotate at desired_cps'''
16          actual_cps = self.end.get_cps()
17          error = desired_cps - actual_cps
18          self.mot.set_speed(P*error)
19          # return speed (e.g. for plotting)
20          return actual_cps
```