4/15/2019 p_controller.py

```
from MotorController import *
 1
   from DRV8833 import *
 2
   from Encoder import *
 3
4
5
   desired_cps = 100 # controller setpoint
                       # controller proportional gain
   P = 1
6
7
   Ts = 20
                        # controller operating period in [ms]
8
9
   controller = MotorController(DRV8833(19, 16), Encoder(34, 39, 0))
10
   def callback(timer):
11
        global controller, desired_cps, P
12
        # proportional control and print actual_cps (for plotting)
13
        print(controller.p_control(desired_cps, P))
14
15
   timer = Timer(0)
16
   timer.init(period=Ts, mode=Timer.UP, callback=callback(timer))
17
```