4/22/2019 vertical.py

```
from machine import Pin, I2C, Timer
 1
   from board import *
 2
   from bno055 import BNO055 # IMU
 3
4
5
   from drv8833 import DRV8833 # your implementation
   from motor import PIDMotor # your implementation, make sure this is named right!
7
   from encoder import Encoder # your implementation, don't forget clear_count
   from balance import Balance
8
9
   import gc # for garbage collection methods
10
11
   i2c = I2C(0, sda=23, scl=22, freq=12500)
12
   imu = BNO055(i2c)
13
14
15
   accel = imu.accelerometer()
   alpha = 90 - math.asin(accel/9.8)
16
17
   actual = imu.euler()
18
   print(alpha)
19
20
   print(actual)
21
```