

```

1  from XRPLib.encoded_motor import EncodedMotor
2  from XRPLib.pid import PID
3  from XRPLib.timeout import Timeout
4  import time
5  import math
6
7  from pump import Pump
8  from moisture import MoistureSensor
9
10 class AgBot():
11     @classmethod
12     def get_default_agbot(cls):
13         pump = Pump.get_default_pump()
14         moisture = MoistureSensor.get_default_moisture_sensor()
15         return AgBot(pump, moisture)
16
17     def __init__(self, pump, moisture):
18         self.pump = pump
19         self.sensor = moisture
20
21         self.stop()
22
23     def stop(self):
24         self.pump.stop()
25
26     async def read(self):
27         reading = self.sensor.read()
28         return reading
29
30     async def water(self, ml):
31         await self.pump.water(ml)
32
33 if __name__ == "__main__":
34
35     bot = AgBot.get_default_agbot()
36
37     # encMotor1 = EncodedMotor.get_default_encoded_motor(1)
38     # encMotor2 = EncodedMotor.get_default_encoded_motor(2)
39     # encMotor3 = EncodedMotor.get_default_encoded_motor(3)
40     # encMotor4 = EncodedMotor.get_default_encoded_motor(4)
41
42     # xy = XY(encMotor1, encMotor2, 385, 265)
43     # z = Z(encMotor4)
44     # pump = Pump(encMotor3)
45     # ms = MoistureSensor()
46
47     # gantry = AgBot.get_default_agbot(x_size = 385, y_size = 265)
48     # gantry.manual()
49

```