

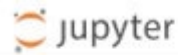
Car attitude angle reading

1. Experimental purpose

Realize the car attitude angle reading of the car.

2. Experimental path source code

Enter the car system, end the car program, enter "ip (ip is the car's ip): 8888" in the browser, enter the password "yahboom"



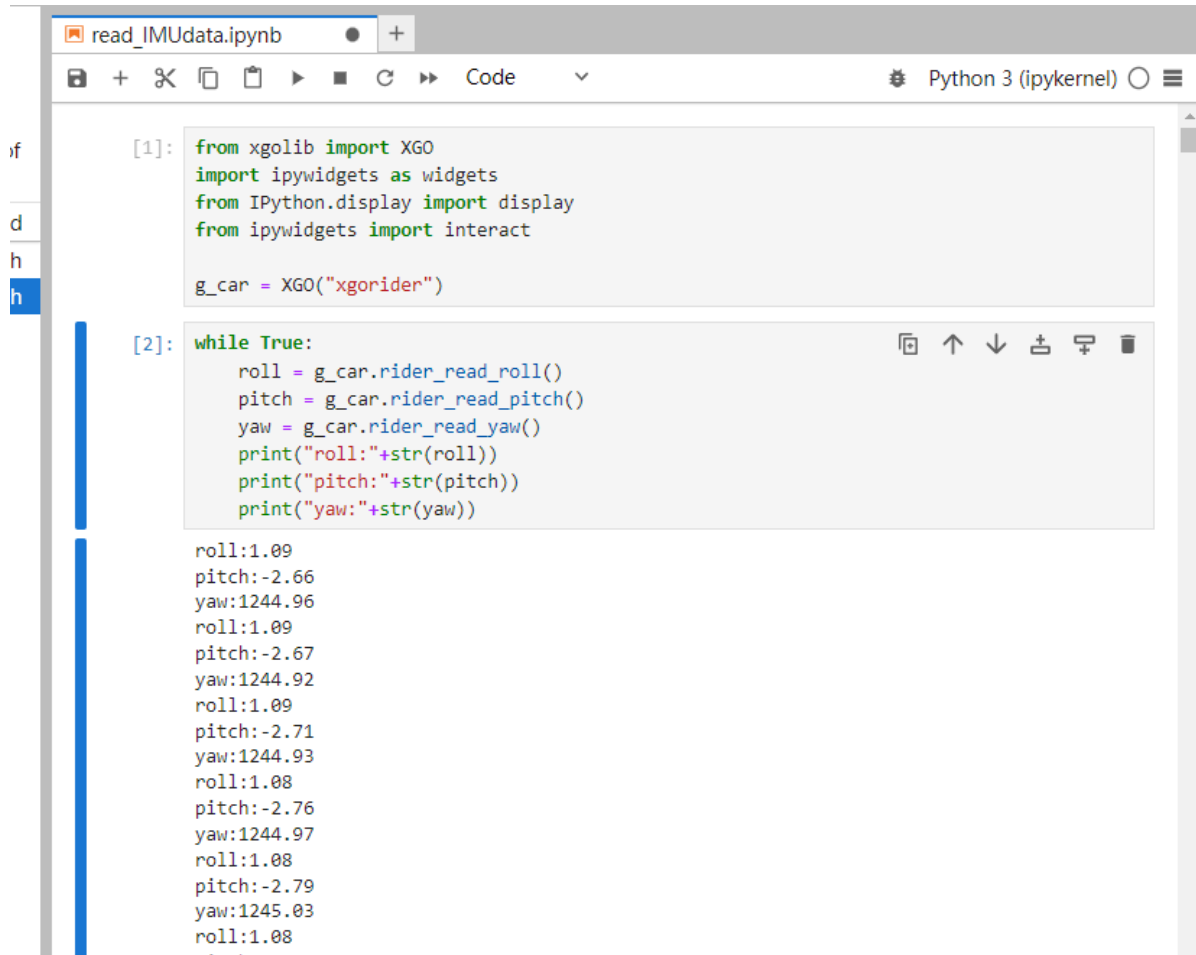
Password:

Then log in

Enter the path of **Rider-pi_class/2.Basic Control Ooperations/7.Reading the attitude angle of the car** and run **read IMUdata.ipynb**.

3. Experimental phenomenon

After running the code, the underlying IMU data can be printed out



```
[1]: from xgolib import XGO
import ipywidgets as widgets
from IPython.display import display
from ipywidgets import interact

g_car = XGO("xgorider")

[2]: while True:
    roll = g_car.rider_read_roll()
    pitch = g_car.rider_read_pitch()
    yaw = g_car.rider_read_yaw()
    print("roll:"+str(roll))
    print("pitch:"+str(pitch))
    print("yaw:"+str(yaw))

roll:1.09
pitch:-2.66
yaw:1244.96
roll:1.09
pitch:-2.67
yaw:1244.92
roll:1.09
pitch:-2.71
yaw:1244.93
roll:1.08
pitch:-2.76
yaw:1244.97
roll:1.08
pitch:-2.79
yaw:1245.03
roll:1.08
```

4. Main source code analysis

```
while True:
    roll = g_car.rider_read_roll()
    pitch = g_car.rider_read_pitch()
    yaw = g_car.rider_read_yaw()
    print("roll:"+str(roll))
    print("pitch:"+str(pitch))
    print("yaw:"+str(yaw))
```

Read the underlying IMU data through the API interface. And print it out.