1. Introduction of API

The API corresponding to control single servo:

Arm_serial_servo_write(id, angle, time)

Function: control bus servo rotate to specific angle.

Parameter explanation:

id: The ID number of the servo to be controlled, the range is 1~6, each ID number represents a servo.

angle: The angle to which the servo is controlled. Except for the No. 5 servo (ID=5), the control range of other servos is 0~180, and the control range of the No. 5 servo is 0~270.

time: Control the running time of the servo. Within the effective range, the servo rotates at the same angle. The smaller the input running time, speed is faster.

If wen input 0, the servo will rotate with fastest speed.

Return value: None.

2. About code

Path: /home/jetson/Dofbot/3.ctrl_Arm /3.ctrl_servo.ipynb

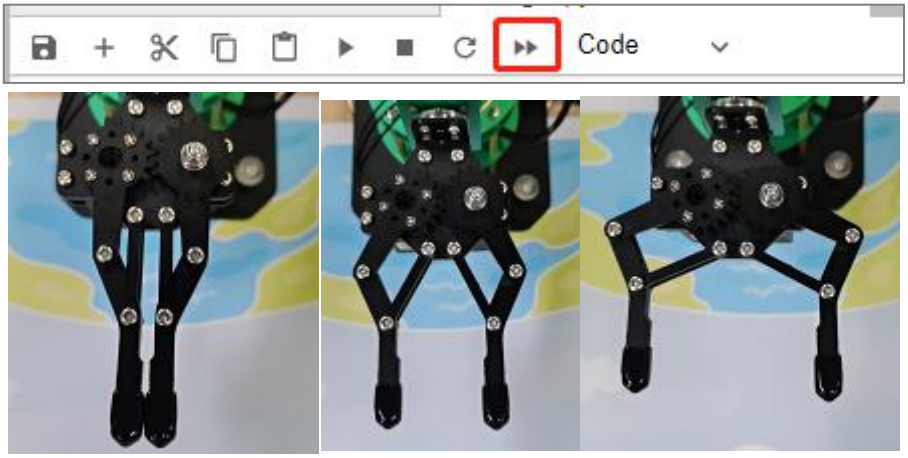
```
#!/usr/bin/env python3
#coding=utf-8
import time
from Arm_Lib import Arm_Device

# Get DOFBOT object
Arm = Arm_Device()
time.sleep(.1)
```

```
# Separately control a servo to move to a certain angle
id = 6

Arm.Arm_serial_servo_write(id, 90, 500)
time.sleep(1)
```

```
# Control a servo to switch angles
id = 6

def main():
    while True:
        Arm.Arm_serial_servo_write(id, 120, 500)
        time.sleep(1)
        Arm.Arm_serial_servo_write(id, 50, 500)
        time.sleep(1)
        Arm.Arm_serial_servo_write(id, 120, 500)
        time.sleep(1)
        Arm.Arm_serial_servo_write(id, 180, 500)
        time.sleep(1)
```

```
try :
    main()
except KeyboardInterrupt:
    print(" Program closed! ")
    pass
del Arm    # Release the Arm object
```

Open the program file in jupyter lab, and click the run button on the toolbar, you can see that the grip of the DOFBOT keeps changing its angle in loop.



Click the stop button on the toolbar to exit this program.