

1. Introduction of API

The API corresponding to read the angle of a single bus servo:

Arm_serial_servo_read(id)

Function: Read the current angle value of the bus servo.

Parameter explanation:

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

Return value: Corresponding to the current angle of the ID servo, when ID=5, the angle range is 0~270, and others servo angle range are 0~180.

2. About code

Path: /home/dofbot/Dofbot/3.ctrl_Arm/4.ctrl_servo.ipynb

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

# get a robotic arm object
Arm = Arm_Device()
time.sleep(.1)

# Read the angle value of all servos and print out
def main():

    while True:
        for i in range(6):
            aa = Arm.Arm_serial_servo_read(i+1)
            print(aa)
            time.sleep(.01)
        time.sleep(.5)
        print(" END OF LINE! ")

try :
    main()
except KeyboardInterrupt:
    print(" Program closed! ")
    pass

# After controlling the movement of a servo individually, read its angle
id = 6
angle = 150
```

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

aa = Arm.Arm_serial_servo_read(id)
print(aa)

time.sleep(.5)

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 angle values of the six servos of the DOFBOT will be printed out.



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

