

Read Servo Angle

1. API Introduction

The API corresponding to reading a single bus servo angle is:

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 read, range is 1~6. Each ID number represents a servo, with the servo at the bottom having ID 1, increasing upwards, and the top servo having ID 6.

Return value: The current angle of the corresponding ID servo. When ID=5, the angle range is 0~270, others are 0~180.

2. Code Content

Code path:

```
~/dofbot_pro/dofbot_ctrl/scripts/04.read_servo.ipynb
```

```
#!/usr/bin/env python3
#coding=utf-8
import time
from Arm_Lib import Arm_Device
# Create robotic arm object
Arm = Arm_Device()
time.sleep(.1)

# Read the angles of all servos and print them in a loop
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
```

```
# Control a single servo to move, then 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 from jupyter lab, and click the "Run entire notebook" button on the jupyter lab toolbar, jupyter lab will print out the current angle values of the six servos of the robotic arm.



```
90
90
90
90
89
178
END OF LINE!
```

To exit, click the stop button on the toolbar.



