Control a single servo

1. API Introduction

The API corresponding to controlling a single bus servo is:

Arm_serial_servo_write(id, angle, time)

Function: Control the angle to which the bus servo is to run.

Parameter explanation:

id: The ID number of the servo to be controlled, ranging from 1 to 6. Each ID number represents a servo. The ID of the servo at the bottom is 1, and it increases upwards. The ID of the top servo is 6.

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

time: The time to control the running of the servo. Within the valid range, the servo rotates at the same angle. The smaller the input running time, the faster the servo moves. If 0 is input, the servo runs at the fastest speed.

Return value: None.

2. Code content

Code path:

```
~/dofbot_pro/dofbot_ctrl/scripts/03.ctrl_servo.ipynb
```

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

```
# Control a servo to move to a certain angle
id = 6
Arm.Arm_serial_servo_write(id, 90, 500)
time.sleep(1)
```

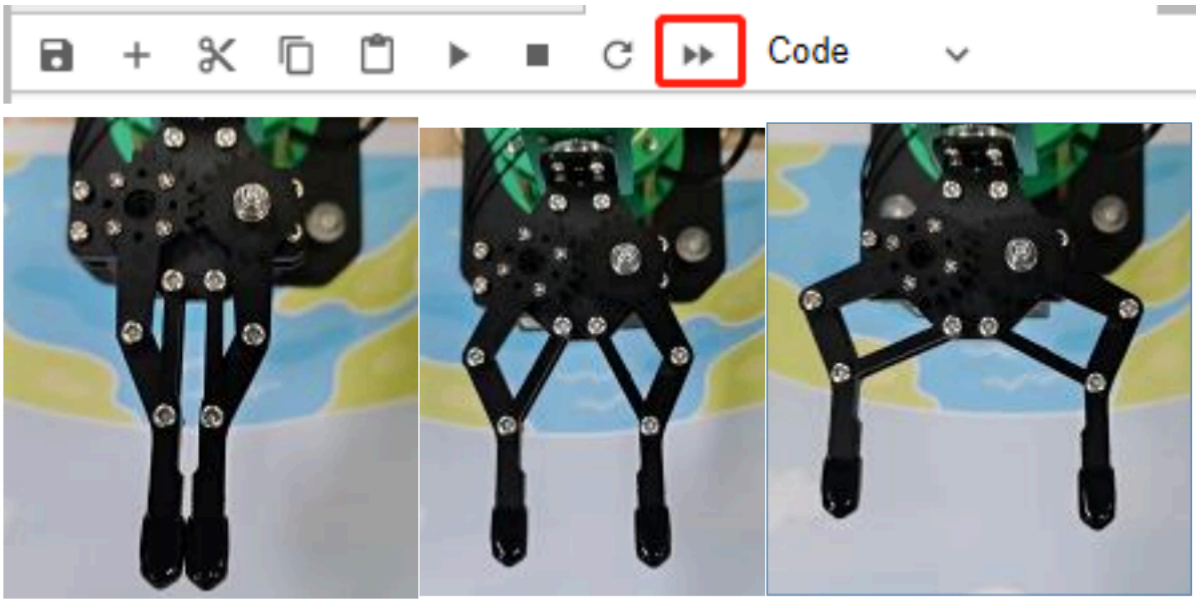
```
# Control a servo to switch angles in a loop
id = 6
def main():
while True:
Arm.Arm_serial_servo_write(id, 120, 500)
time.sleep(1)
Arm.Arm_serial_servo_write(id, 50, 500)
time.sleep(1)
Arm.Arm_serial_servo_write(id, 120, 500)
time.sleep(1)
```

```
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 from jupyter lab and click the Run the entire notebook button on the jupyter lab toolbar to see that the robot arm's claws keep changing angles.



If you want to exit, click the stop button on the toolbar.