## **Control RGB Lights**

## 1. API Introduction

The API corresponding to the RGB light is: Arm\_RGB\_set(R, G, B)

Function: Set the color of the RGB light.

Parameter explanation:

R: Controls the brightness of the red color of the RGB light, the range is 0-255, the larger the value, the brightness.

G: Controls the brightness of the green color of the RGB light, the range is 0-255, the larger the value, the brightness.

B: Controls the brightness of the blue color of the RGB light, the range is 0-255, the larger the value, the brighter the brightness.

Return value: None.

## 2. Code content

Code path:

```
~/dofbot_ws/src/dofbot_ctrl/scripts/01.rgb.ipynb
```

```
Cycle through the RGB lights on the robot arm expansion board to illuminate red,
green, and blue.
#!/usr/bin/env python3
#coding=utf-8
import time
from Arm_Lib import Arm_Device
# Get the object of the robotic arm
Arm = Arm_Device()
time.sleep(.1)
def main():
     while True:
     Arm.Arm_RGB_set(50, 0, 0) #RGB Red light on
     time.sleep(.5)
     Arm.Arm_RGB_set(0, 50, 0) #RGB Green light on
     time.sleep(.5)
     Arm.Arm_RGB_set(0, 0, 50) #RGB blue light on
     time.sleep(.5)
     print(" END OF LINE! ")
try:
     main()
except KeyboardInterrupt:
     # Release the Arm object
     del Arm
     print(" Program closed! ")
     pass
```

Open the code file from jupyter lab and click the Run the entire notebook button on the jupyter lab toolbar. You can see the RGB light on the robotic arm expansion board turns red, green, and blue every 0.5 seconds.



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

