

Below is a program for digital output using a **Raspberry PICO**. GPIO pins 14, 15, 18, and 19 are used. In this program, the output channels are turned off for one second, then turned on one at a time. After this, there is a 3-second pause, and the cycle repeats.

```
1 from machine import Pin
2 import utime
3
4 # Define the GPIO pins for digital output
5 relay_pins = [14, 15, 18, 19]
6
7 while True:
8     for i in relay_pins:
9         relay=Pin(i, Pin.OUT)
10        relay.value(1)
11        utime.sleep(1)
12    for i in relay_pins:
13        relay=Pin(i, Pin.OUT)
14        relay.value(0)
15        utime.sleep(1)
16    utime.sleep(3)
```

The following program is an example of digital input in Python for the **Raspberry PICO**:

```
1 import machine
2
3 # define the pins for each channel
4 channel_pins = [machine.Pin(10, machine.Pin.IN),
5                  machine.Pin(11, machine.Pin.IN),
6                  machine.Pin(12, machine.Pin.IN),
7                  machine.Pin(13, machine.Pin.IN)]
8
9 # read the state of each channel and print the result
10 for i in range(len(channel_pins)):
11     channel_state = channel_pins[i].value()
12     print(f"Channel {i}: {channel_state}")
```

This program first imports the **machine** module. Then, pins are defined for each channel using the **machine.Pin** method, specifying **machine.Pin.IN** to indicate that the pin will be used for input. The input channels are then entered in an infinite loop, and the result is printed.