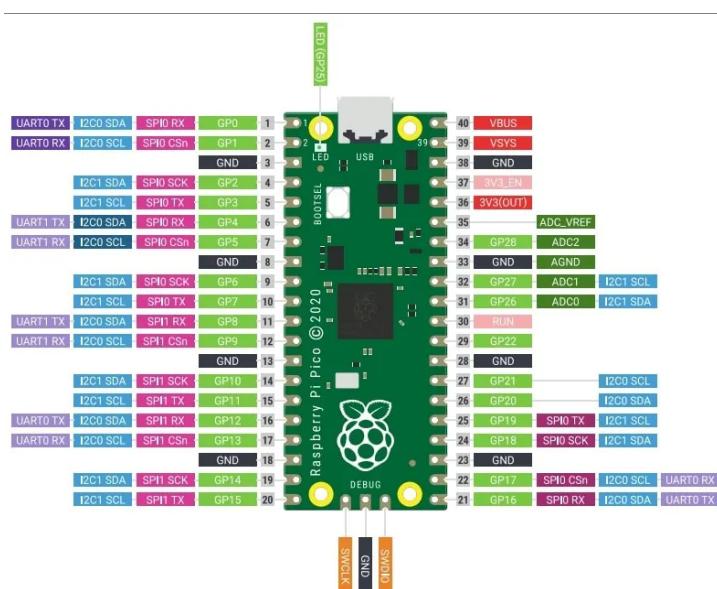
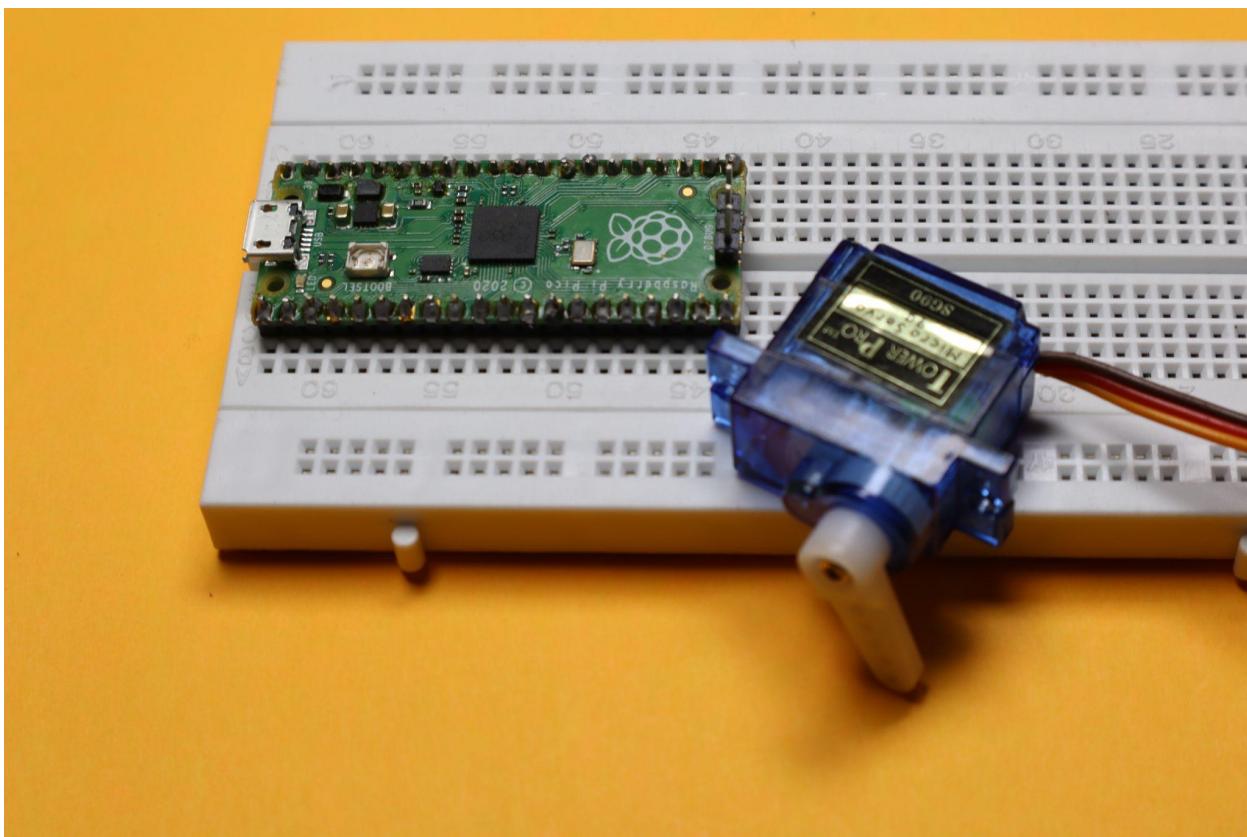


Three beginner friendly projects using Raspberry pi pico

Project 1:

Project How to control servo motor using Raspberry pi pico



Material Required 📦 :

SNo.	Components	Buy Components
1.	Servo Motor	https://amzn.to/3q44ZCr
2.	Raspberry pi Pico	https://amzn.to/3Uc5szT
3.	Breadboard Large	https://amzn.to/3QdsROy

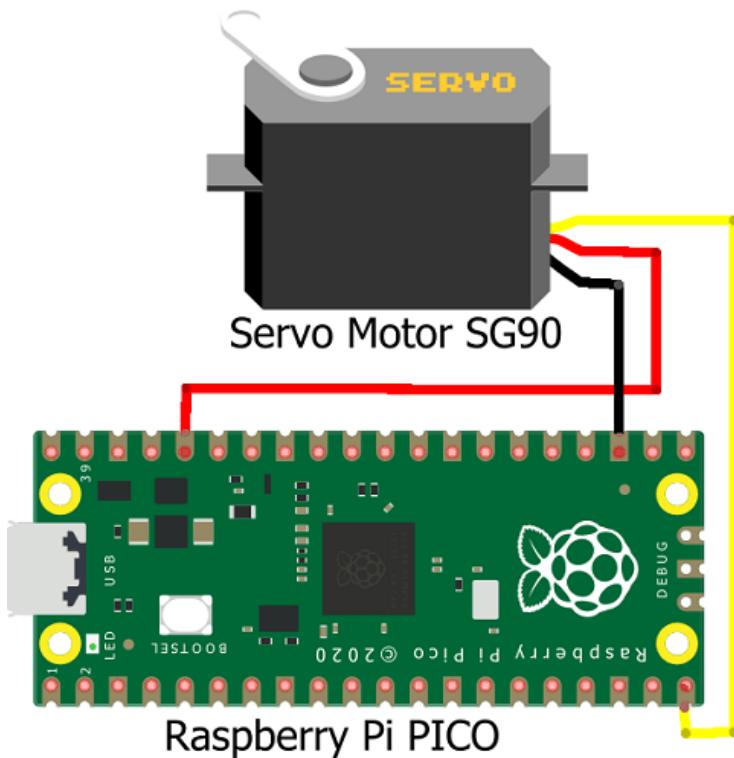
Download Library

```
from time import sleep  
from machine import Pin  
from machine import PWM
```

Download Thonny Software for micropython :

<https://thonny.org/>

Circuit Diagram ⚡ :



Code 🖥 :

```
from time import sleep

from machine import Pin

from machine import PWM

pwm = PWM(Pin(15))

pwm.freq(50)

#Function to set an angle

#The position is expected as a parameter

def setServoCycle (position):

    pwm.duty_u16(position)

    sleep(0.01)

while True:

    for pos in range(1000,9000,20):

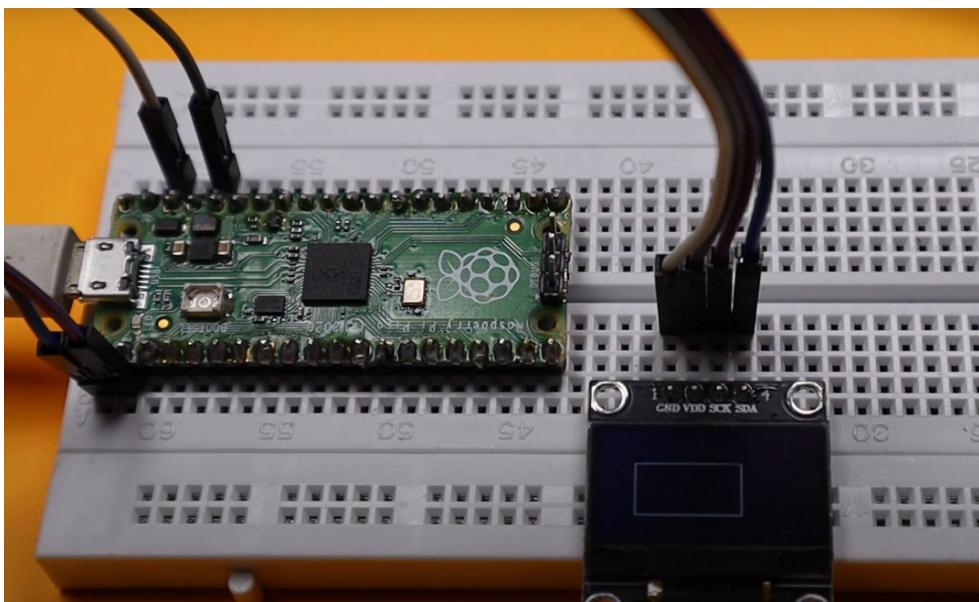
        setServoCycle(pos)

    for pos in range(9000,1000,-20):

        setServoCycle(pos)
```

Project 2:

Interfacing of I2C OLED display with Raspberry pi Pico



Material Required :

SNo.	Components	Buy Components
1.	I2C Oled Display	https://amzn.to/3eg9Hdt
2.	Raspberry pi Pico	https://amzn.to/3Uc5szT
3.	Breadboard Large	https://amzn.to/3QdsROy

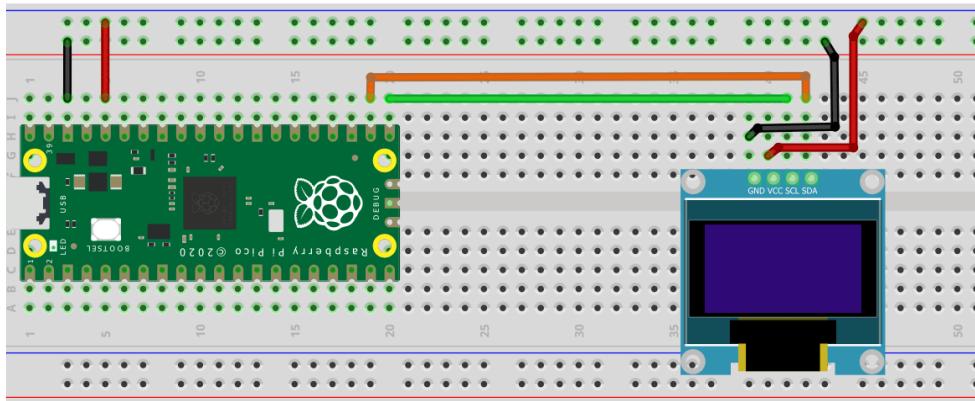
Download Library :

```
from machine import Pin, I2C  
from ssd1306 import SSD1306_I2C
```

Download Thonny Software for micropython :

<https://thonny.org/>

Circuit Diagram ⚡ :



Code 💻 :

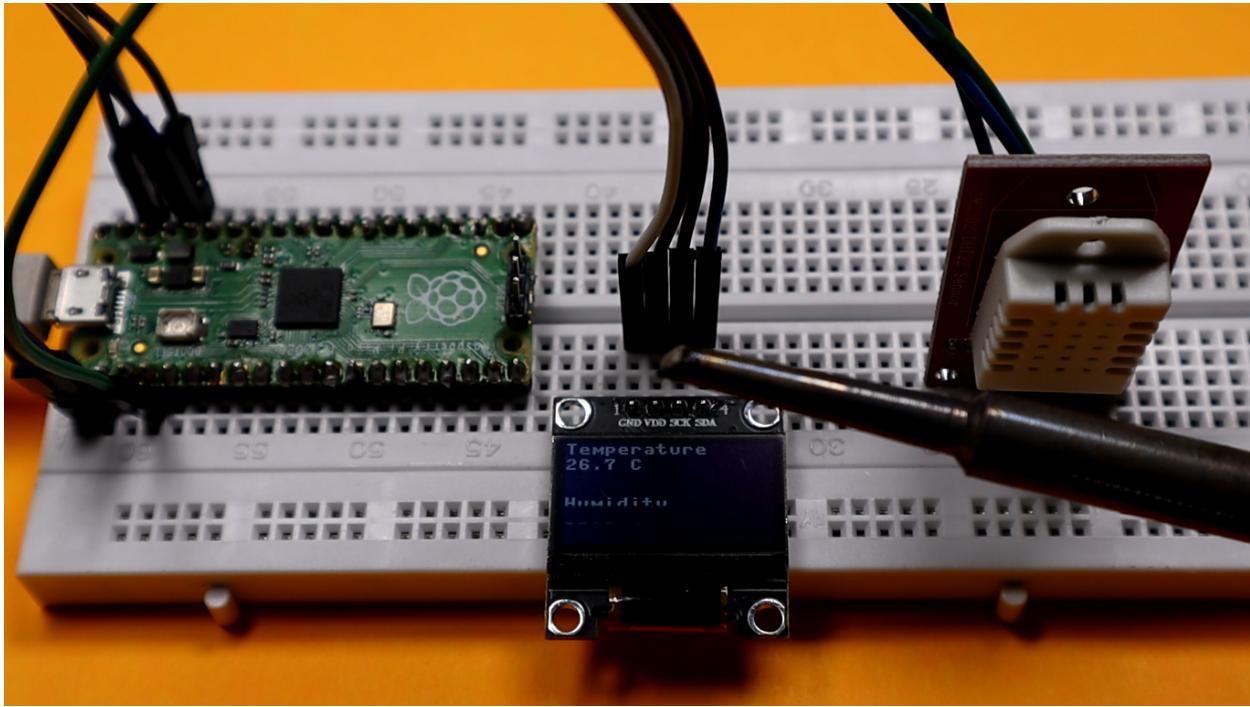
```
from machine import Pin, I2C
from ssd1306 import SSD1306_I2C

i2c=I2C(0,sda=Pin(16), scl=Pin(17), freq=400000)
oled = SSD1306_I2C(128, 64, i2c)

oled.text("WELCOME!", 0, 0)
oled.text("This is a text", 0, 16)
oled.text("GOOD BYE", 0, 32)
oled.show()
```

Project 3 :

How to use DHT22 sensor with Raspberry pi Pico



Material Required :

SNo.	Components	Buy Components
1.	I2C Oled Display	https://amzn.to/3eg9Hdt
2.	Raspberry pi Pico	https://amzn.to/3Uc5szT
3.	Breadboard Large	https://amzn.to/3QdsROy
4.	Connecting Wires	https://amzn.to/3cl97EY

5.

DHT22 sensors

<https://amzn.to/3B5a5EB>

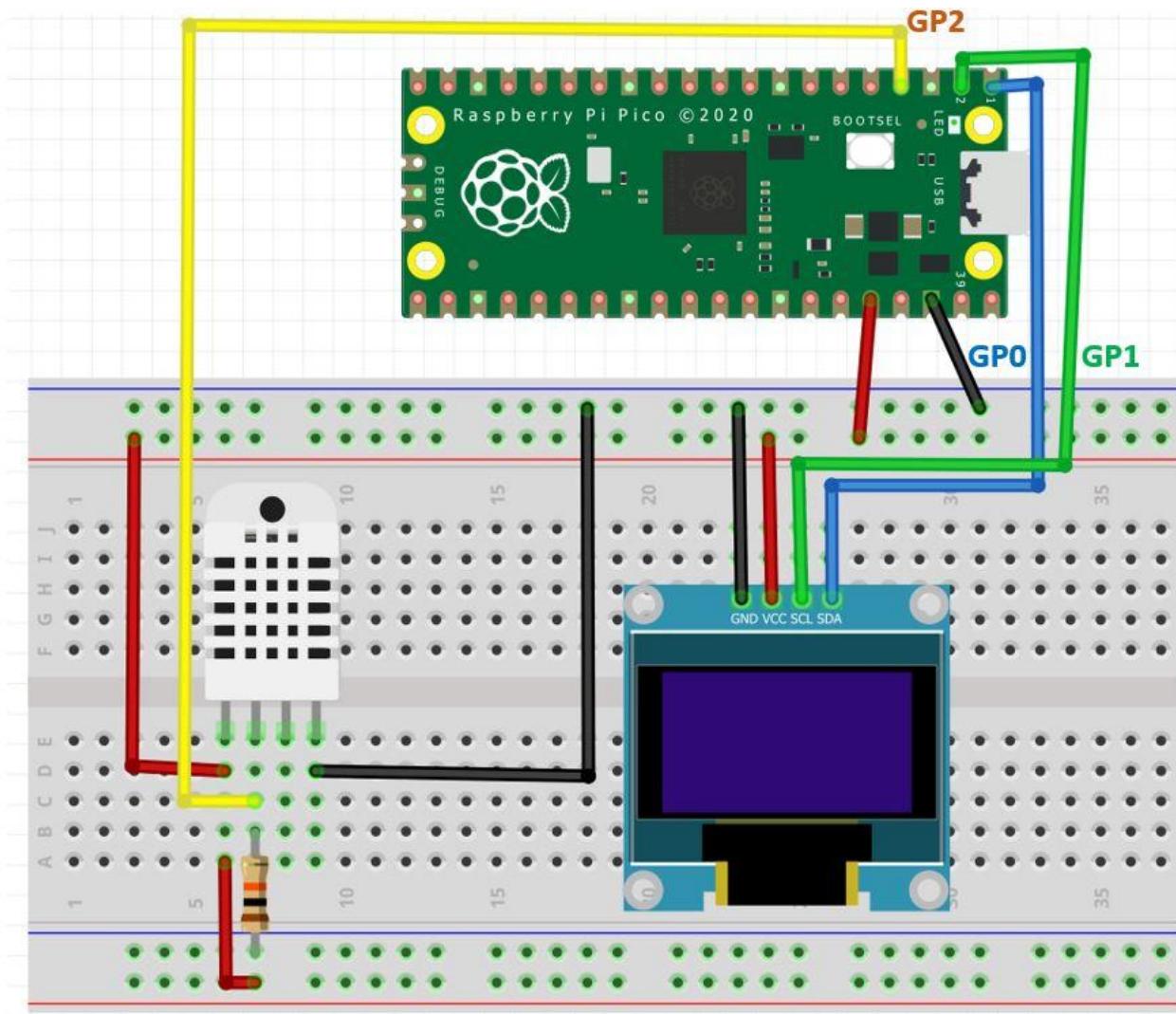
Download Library :

```
from machine import Pin, I2C  
from ssd1306 import SSD1306_I2C
```

Download Thonny Software for micropython :

<https://thonny.org/>

Circuit Diagram ⚡:



Code  :

```
from machine import Pin, I2C
from time import sleep
import dht
from ssd1306 import SSD1306_I2C

sensor = dht.DHT22(Pin(2))
i2c=I2C(0,sda=Pin(0), scl=Pin(1), freq=400000)      #initializing the
I2C method
oled = SSD1306_I2C(128, 64, i2c)

while True:
    oled.fill(0)
    sensor.measure()
    temp = str(sensor.temperature())
    hum = str(sensor.humidity())
    oled.text("Temperature",0,0)
    oled.text(temp + " C",0,10)
    oled.text("Humidity",0,35)
    oled.text(hum + " %",0,45)
    oled.show()
    sleep(2)
```