import machine

import utime

# Set up PWM pin

led\_pin=machine.Pin(15)

pwm=machine.PWM(led\_pin)

# Set the PWM frequency (in Hz)

pwm.freq(1000)

# Duty cycle values range from 0 to 1023

# 0 - LED is off, 1023 - LED is fully on

# Adjust duty cycle for desired intensity

brightness\_levels=[0,256,512,768,1023]

for brightness in brightness\_levels:

pwm.duty\_u16(brightness)

print("brightness level:",brightness)

utime.sleep(2)

pwm.deinit()

led\_pin.low()