import RPi.GPIO as GPIO

import time

# Pin Definitions

led\_pin = 18 # GPIO pin for the LED

# GPIO setup

GPIO.setmode(GPIO.BCM) # Use BCM pin numbering

GPIO.setup(led\_pin, GPIO.OUT) # Set the LED pin as output

try:

while True:

# Turn on the LED

print("LED ON")

GPIO.output(led\_pin, GPIO.HIGH) # Turn on the LED

time.sleep(1) # Keep the LED on for 1 second

# Turn off the LED

print("LED OFF")

GPIO.output(led\_pin, GPIO.LOW) # Turn off the LED

time.sleep(1) # Keep the LED off for 1 second

except KeyboardInterrupt:

print("Program stopped by user")

finally:

# Clean up GPIO settings

GPIO.cleanup()