Write a Python Code For Blinked LED And Traffic Lights In Raspberry Pi

Assignment-3

By

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**Write a code for Blinked LED and Traffic Lights in Raspberry Pi**



**Coding for Blinked LED**

Import RPi.GPIO as GPIO # RPi.GPIO can be referred as GPIO from now

Import time

ledPin = 22 # pin22

def setup():

GPIO.setmode(GPIO.BOARD) # GPIO Numbering of Pins

GPIO.setup(ledPin, GPIO.OUT) # Set ledPin as output

GPIO.output(ledPin, GPIO.LOW) # Set ledPin to LOW to turn Off the LED

Def loop():

While True:

Print ‘LED on’

GPIO.output(ledPin, GPIO.HIGH) # LED On

Time.sleep(1.0) # wait 1 sec

Print ‘LED off’

GPIO.output(ledPin, GPIO.LOW) # LED Off

Time.sleep(1.0) # wait 1 sec

Def endprogram():

GPIO.output(ledPin, GPIO.LOW) # LED Off

GPIO.cleanup() # Release resources

If \_\_name\_\_ == ‘\_\_main\_\_’: # Program starts from here

Setup()

Try:

Loop()

Light Except KeyboardInterrupt: # When ‘Ctrl+C’ is pressed, the destroy() will be executed

Endprogram()

**Coding for Traffic lights**

From gpiozero import LED

From time import sleep

Green = LED(17)

Yellow = LED(27)

Red = LED(22)

Def switchLights (greenLight, yellowLight, redLight, sleepTime):

If greenLight:

Green.on()

Else:

Green.off()

If yellowLight:

Yellow.on()

Else:

Yellow.off()

If redLight:

Red.on()

Else:

Red.off()

Sleep(sleepTime)

While True:

switchLights (True, False, False, 10)

switchLights (False, True, False, 1)

switchLights (False, False, True, 10)

switchLights (False, True, True, 1)