

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

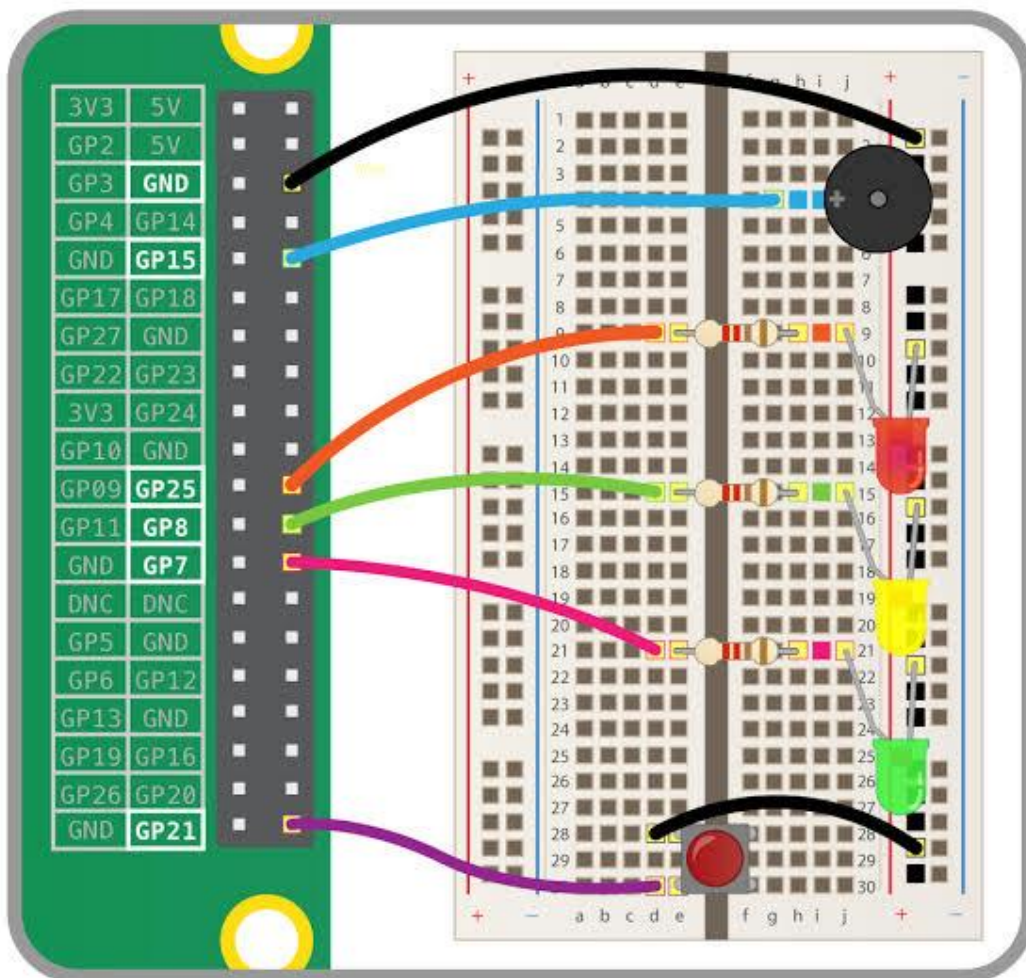
Assignment-3

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



Coding for Blinking 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)