Write a Python Code For Blinked LED And Traffic Lights In Raspberry Pi
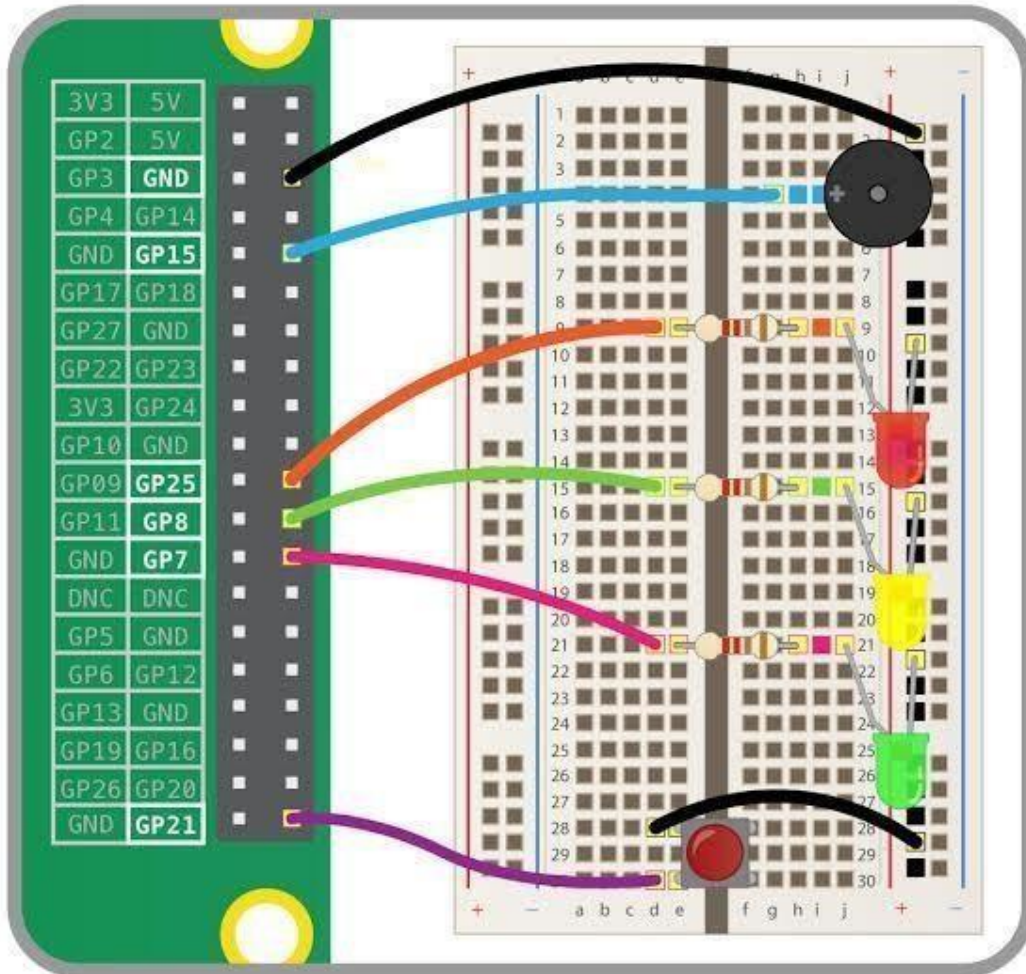
Assignment-3

By:

R.Bavani

952319104005

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)
```