WRITE A PYTHON CODE FOR BLINKED LED AND TRAFFIC LIGHTS IN RASBERRY Pi

ASSIGNMENT:3

By

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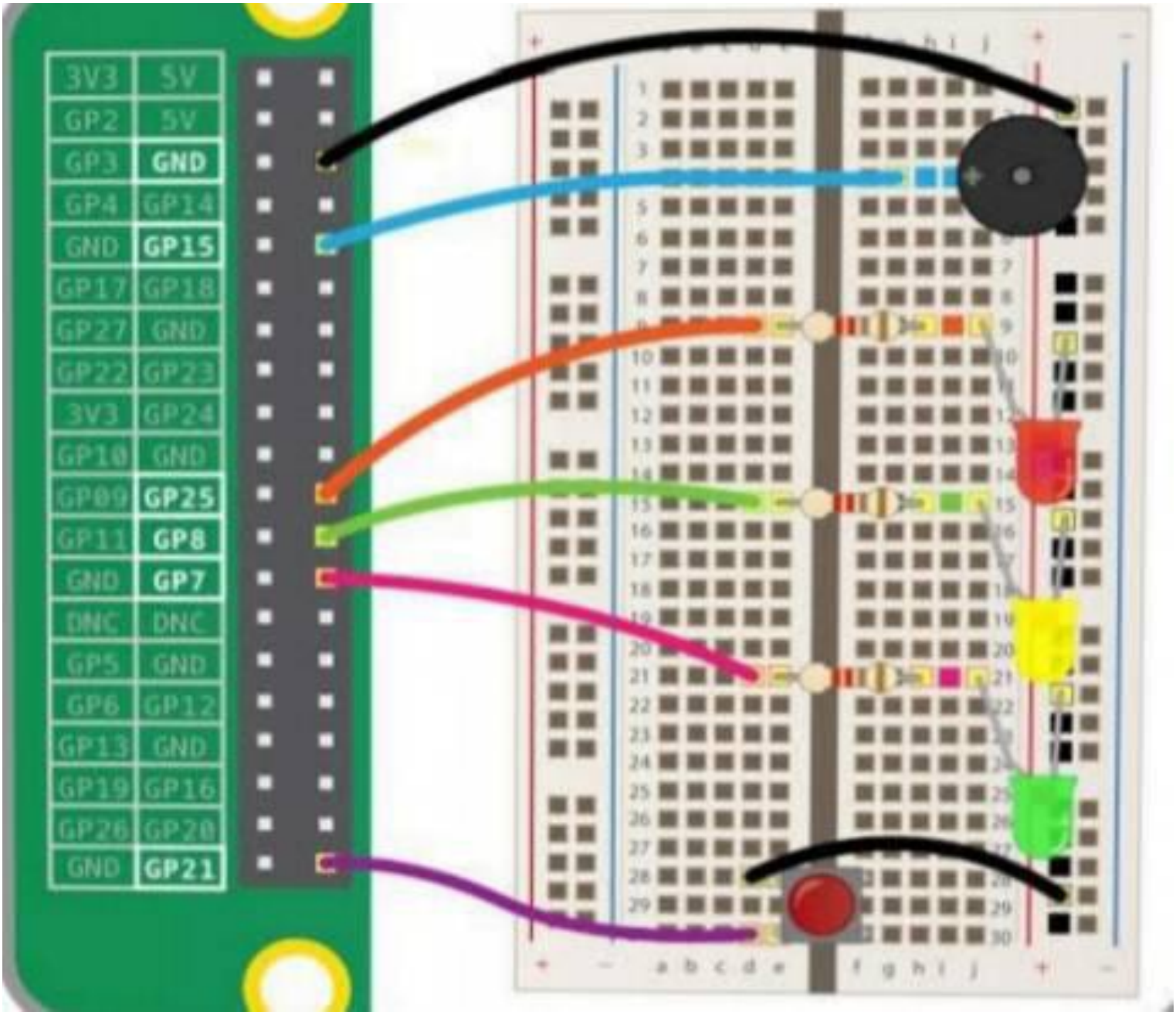

CODING FOR BLINKED LED

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 letpin as output

GPIO.output(ledpin,GPIO.LOW)#set

Letpin to LOW to turn off the LED

Defloop():

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 keyboard Interrupt :#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)
```