

ASSIGNMENT 3

Assignment Date	06.10.2022
Student Name	ARAVIND RAJ.R
Student Roll No	410819104001
Maximum Marks	2 Marks

Question:

Write python code for blinking LED and Traffic lights for Raspberry pi.

Solution:

```
import RPi.GPIO as GPIO
import time
try:
    def lightTraffic(led1,led2,led3,delay):
        GPIO.output(led1,1)
        time.sleep(delay)
        GPIO.output(led1,0)
        GPIO.output(led2,1)
        time.sleep(delay)
        GPIO.output(led2,0)
        GPIO.output(led3,0)
        time.sleep(delay)
        GPIO.output(led3,0)
        GPIO.setmode(GPIO.BCM)
        button=19
        GPIO.setup(button,GPIO.IN,pull_up_down=GPIO.PUD_UP)
        ledGreen=16
        ledYellow=12
        ledRed=23
        GPIO.setup(ledGreen.GPIO.OUT)
        GPIO.setup(ledYellow.GPIO.OUT)
        GPIO.setup(ledRed.GPIO.OUT)
        While True:
            input_state=GPIO.input(button)
            if input_state==False;
                print("Button Pressed")
```

```
        lightTraffic(ledGreen,ledYellow,ledRed,1)
    else:
        GPIO.output(ledGreen,0)
        GPIO.output(ledYellow,0)
        GPIO.output(ledRed,0)
except KeyboardInterrupt:
    print"You have executed the program"
finally:
    GPIO.cleanup()
```