

Assignment -3

Assignment Date	07 OCTOBER 2022
Student Name	R.CHANDRU
Student Roll Number	732919ECR020
Maximum Marks	2 Marks

QUESTION:

**Write python code for blinking LED and Traffic lights for Raspberry pi.
Only python code is enough, no need to execute in raspberry pi.**

```
import RPi.GPIO as GPIO
import time

GPIO.setmode(GPIO.BOARD)
GPIO.setup(7, GPIO.OUT) #Green LED
GPIO.setup(11, GPIO.OUT)#Yellow LED
GPIO.setup(13, GPIO.OUT) #Red LED
GPIO.setup(15, GPIO.IN, pull_up_down=GPIO.PUD_UP)#Button
def turn_on(pin, seconds):
    GPIO.output (pin,GPIO.HIGH)
    time.sleep(seconds)
def turn_off (pin, seconds):
    GPIO.output (pin, GPIO.LOW)
    time.sleep(seconds)
try:
    while True:
        button_state=GPIO.input (15)
        if button_state== True:
            turn_on(13,2)
            turn_off(13,.1)
            turn_on(7,4)
            turn_off(7,.11)
            turn_on(11,1)
            turn_off(11,1)
        else:
            if button_state== False:
                GPIO.output (7,GPIO.LOW)
                GPIO.output(11,GPIO.LOW)
                GPIO.output (13,GPIO.LOW)
                time.sleep(.1)
```

```
except KeyboardInterrupt:  
    GPIO.cleanup()  
    print("Traffic Light Sequence Done")
```