

ASSIGNMENT – III

Write Python code for blinking LED and Traffic lights for 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)
    tum_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()
```