

ASSIGNMENT-3

PYTHON CODE FOR BLINKING LED AND TRAFFIC LIGHTS FOR RASPBERRY PI

PYTHON CODE FOR LED:

```
import RPi.GPIO as GPIO

from time import sleep

GPIO.setwarnings(False)

GPIO.setmode(GPIO.BOARD)

GPIO.setup(8,GPIO.OUT,initial=GPIO.LOW)


while True:

    GPIO.output(8,GPIO.HIGH)

    sleep(1)

    GPIO.output(8,GPIO.LOW)

    sleep(1)
```

PYTHON CODE FOR TRAFFIC LIGHTS:

```
import Rpi.GPIO as GPIO

import time

import signal

import sys


GPIO.setmode(GPIO.BCM)

GPIO.setup(9,GPIO.OUT)

GPIO.setup(10,GPIO.OUT)

GPIO.setup(11,GPIO.OUT)
```

```
def allLightsOff(signal,framer):  
    GPIO.output(9,False)  
    GPIO.output(10,False)  
    GPIO.output(11,False)  
    GPIO.cleanup()  
    sys.exit(0)  
    signal.signal(signal.SIGINT,allLightsOff)
```

```
while True:  
    #Red  
    GPIO.output(9,True)  
    Time.sleep(3)  
    #Red and amber  
    GPIO.output(10,True)  
    Time.sleep(1)  
    #Green  
    GPIO.output(9,False)  
    GPIO.output(10,False)  
    GPIO.output(11,True)  
    Time.sleep(5)  
    #Amber  
    GPIO.output(11,False)  
    GPIO.output(10,True)  
    Time.sleep(2)  
    #Amber off  
    GPIO.output(10,False)
```