

ASSIGNMENT 3

PYTHON CODE FOR BLINKING LED(RASPBERRY PI):

```
import Time
import RPI.GPIO as GPIO
GPIO.setmode(GPIO.BOARD)
GPIO.setup(11,GPIO.OUT)
GPIO.setup(12,GPIO.OUT)
GPIO.SETUP(13,GPIO.OUT)
while True:
    GPIO.output(11,True) ##Turn on Red Led
    Time.sleep(1) ##wait for one second
    GPIO.output(11,False) ##Turn off Red Led
    Time.sleep(1) ##wait for one second
    GPIO.output(12,True) ##Turn on yellow Led
    Time.sleep(1) ##wait for one second
    GPIO.output(12,False) ##Turn off yellow Led
    Time.sleep(1)
    GPIO.output(13,True) ##Turn on green Led
    Time.sleep(1)
    GPIO.output(13,False) ##Turn off green Led
    Time.sleep(1)
```

PYTHON CODE FOR TRAFFIC LED(RASPBERRY PI):

```
From gpiozero import button,TrafficLights,Buzzer
```

```
From time import sleep
```

```
Buzzer=Buzzer(15)
```

```
Button=Button(21)
```

```
Lights=TrafficLights(25,8,7)
```

```
while True:
```

```
    Button.wait_for_press()
```

```
    Buzzer.on()
```

```
    Lights.green.on() ##on the green led
```

```
    sleep(1) ##wait for one second
```

```
    Lights.amber.on() ##on the yellow led
```

```
    sleep(1) ##wait for one second
```

```
    Lights.red.on() ##on the red led
```

```
    sleep(1)
```

```
    Lights.off() ##off the led
```

```
    Buzzer.off() ##off the buzzer
```