

### ASSIGNMENT 3 : PYTHON CODE FOR BLINKING LED AND TRAFFIC LIGHTS FOR RASPBERRY Pi

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MAXIMUM MARKS	2 MARKS

#### CODE:

```
#BLINKING LED WITH RPi.GPIO LIBRARY
```

```
import RPi.GPIO as GPIO
```

```
import time
```

```
ledPin = 16
```

```
GPIO.setmode(GPIO.BOARD)
```

```
GPIO.setwarnings(False)
```

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

```
while True:
```

```
    GPIO.output(ledPin,GPIO.HIGH)
```

```
    Print('LED ON')
```

```
    time.sleep(1)
```

```
    GPIO.output(ledPin,GPIO.LOW)
```

```
    Print('LED OFF')
```

```
    time.sleep(1)
```

```
#BLINKING TRAFFIC LIGHTS USING gpiozero LIBRARY
```

```
from gpiozero import Button , TrafficLights , Buzzer
```

```
from time import sleep
```

```
red      = LED(5)
```

```
yellow  = LED(6)
green   = LED(13)
buzzer = Buzzer(15)
button = Button(21)
lights  = TrafficLights(5,6,13)
```

```
while True:
```

```
    button.wait_for_press()
```

```
    light.green.on()
```

```
    sleep(1)
```

```
    lights.yellow.on()
```

```
    sleep(1)
```

```
    lights.red.on()
```

```
    sleep(1)
```

```
    lights.off()
```

```
while True:
```

```
    lights.on()
```

```
    buzzer.off()
```

```
    button.wait_for_press()
```

```
    lights.off()
```

```
    buzzer.on()
```

```
    button.wait_for_release()
```

```
while True:
```

```
    lights.blink()
```

```
    buzzer.beep()
```

```
button.wait_for_press()
```

```
lights.off()
```

```
buzzer.off()
```

```
button.wait_for_release()
```