

GAS LEAKAGE MONITORING AND ALERTING SYSTEM

DOMAIN : IOT

TEAM ID: PNT2022TMID15951

TEAM MEMBER: AKSHAYA KS

ASSIGNMENT 3:

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

Code for Blinking LED:

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

```
import time
```

```
LED = 40
```

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

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

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

```
while True:
```

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

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

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

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

Code for Traffic Light System:

```
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()
```

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

```
    sleep(1)
```

```
    lights.amber.on()
```

```
    sleep(1)
```

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

```
    sleep(1)
```

```
    lights.off()
```

```
    buzzer.off()
```