

ASSIGNMENT 3

DOMAIN- IOT

PROJECT TITLE- GAS LEAKAGE MONITORING & ALERTING SYSTEM FOR INDUSTRIES.

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

Note: you are allowed to use web search and complete the assignment.

```
//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()
```