Assignment 3

Team ID	PNT2022TMID06438
Name	PURNACHANDRIGAA R
Project Name	GAS LEAKAGE MONITORING AND ALERTING SYSTEM
Team Members	1 PURNACHANDRIGAA R 2 SELVANAYAKI M 3 VISHNUPRIYA S 4 KIRIRAJ S

Question-1:

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.

Solution:

```python
from gpiozero import Button
button = Button(21)
while True:
print(button.is_pressed)
while True:
if button.is_pressed:
print("Hello")
else:
print("Goodbye")
while True:
button.wait_for_press()
print("Pressed")
button.wait_for_release()
print("Released")
from gpiozero import Button, LED led = LED(25)
while True:
button.wait_for_press()
led.on()
button.wait_for_release()
led.off()
while True:
led.on()
```

```
button.wait_for_press()
led.off()
button.wait_for_release()
while True:
led.blink()
button.wait_for_press()
led.off()
button.wait_for_release()
from gpiozero import Button, TrafficLights lights = TrafficLights(25, 8, 7) while True:
button.wait_for_press()
lights.on()
button.wait_for_release()
lights.off()
while True:
lights.blink()
button.wait_for_press()
lights.off()
button.wait_for_release()
from gpiozero import Button, TrafficLights, Buzzer buzzer = Buzzer(15) 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()
from time import sleep while True:
lights.green.on()
sleep(1)
lights.amber.on()
sleep(1)
lights.red.on()
sleep(1)
lights.off()
while True:
button.wait_for_press()
lights.green.on()
sleep(1)
```

```
lights.amber.on()
sleep(1)
lights.red.on()
sleep(1)
lights.off()
```