Assignment -3
Python Programming

Assignment Date	01 October 2022
Student Name	BATHMA S
Student Roll Number	210819106008
Maximum Marks	2 Marks

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")
```

```python
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()
```

```python
        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()
```