Assignment - 3

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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.

Program:

```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()

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()
```

```python
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()
```