

Assignment -3

Assignment Date	29 September 2022
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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

Solution:

```
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()
```