Assignment -3

Python Programming

Assignment Date	01 October 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.Note: you are allowed to use web search and complete the assignment.

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()
```