

ASSIGNMENT 3

Date	30 October 2022
Team ID	PNT2022TMID14470
Roll No	711319EC0119

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

#Surendhran Assignment

#Write the python code for blinking LED and Traffic lights

#for raspberry pi.

#BUTTON

from gpiozero import Button

button = Button(21)

while True:

print(button.is_pressed)

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()
```

#TRAFFIC LIGHTS

```
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()
```

#TRAFFIC LIGHTS SEQUENCES

```
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()