

ASSIGNMENT 3

Date	30 October 2022
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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

#Sudharsan 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()