ASSIGNMENT-3

Team Members:

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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()
```

```python
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()
```