**ASSIGNMENT 3**

**Internet of Things**

|  |  |
| --- | --- |
| Assignment Date | 3 October 2022 |
| Student Name | SRI SWETHA S |
| Student Roll Number | 610519104099 |
| Maximum Marks | 2 Marks |

**QUESTION:**

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()