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| **Assignment Date** | **07 October 2022** |
| **Student Name** | **N. Renuga Devi** |
| **Student Roll Number** | **920819106049** |
| **Maximum Marks** | **2 Marks** |

**Assignment - 3**

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

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()