**Assignment -3**

Python Programming

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| Assignment Date | 01 October 2022 |
| Student Name | Vaishnavi R |
| Student Roll Number | 720319106025 |
| Maximum Marks | 2 Marks |

**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()

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()