Assignment -3

Assignment Date	
Student Name	Manojkumar G
Student Roll Number	20ECL10
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:

BUTTON

```python
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()
```