

Assignment -3

Python Programming for Raspberry pi

Assignment Date	29 September 2022
Student Name	M. NANDHINI
Student Roll Number	815119104030
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:

PYTHON CODE FOR BLINKING LED FOR RASPBERRY PI

```
from gpiozero import Button, LED
from gpiozero import TrafficLights
from gpiozero import Buzzer
from time import sleep
```

```
button = Button(21)
led = LED(25)
lights = TrafficLights(25, 8, 7)
buzzer = Buzzer(15)
```

```
while True:
    button.wait_for_press()
    print("Pressed")
    button.wait_for_release()
    print("Released")
```

```
while True:
    led.blink()
    button.wait_for_press()
    led.off()
    button.wait_for_release()
```

```
while True:
    lights.blink(2, 2)
    buzzer.beep()
    button.wait_for_press()
    lights.off()
    buzzer.off()
    button.wait_for_release()
```

```
while True:
    lights.green.on()
    sleep(1)
    lights.amber.on()
    sleep(1)
    lights.red.on()
    sleep(1)
    lights.off()
```