

ASSIGNMENT III

Date	01 October 2022
Team ID	PNT2022TMID23797
Project Name	Real time river water quality monitoring and Control System
Maximum Marks	2 Marks

BLINKING LED AND TRAFFIC LIGHT FOR RASPBERRY PI

PROGRAM:

```
from gpiozero import Button, TrafficLights, Buzzer
```

```
from time import sleep
```

```
buzzer = Buzzer(15)
```

```
button = Button(21)
```

```
lights = TrafficLights(25, 8, 7)
```

```
while True:
```

```
    button.wait_for_press()
```

```
    buzzer.on()
```

```
    light.green.on()
```

```
    sleep(1)
```

```
    lights.amber.on()
```

```
    sleep(1)
```

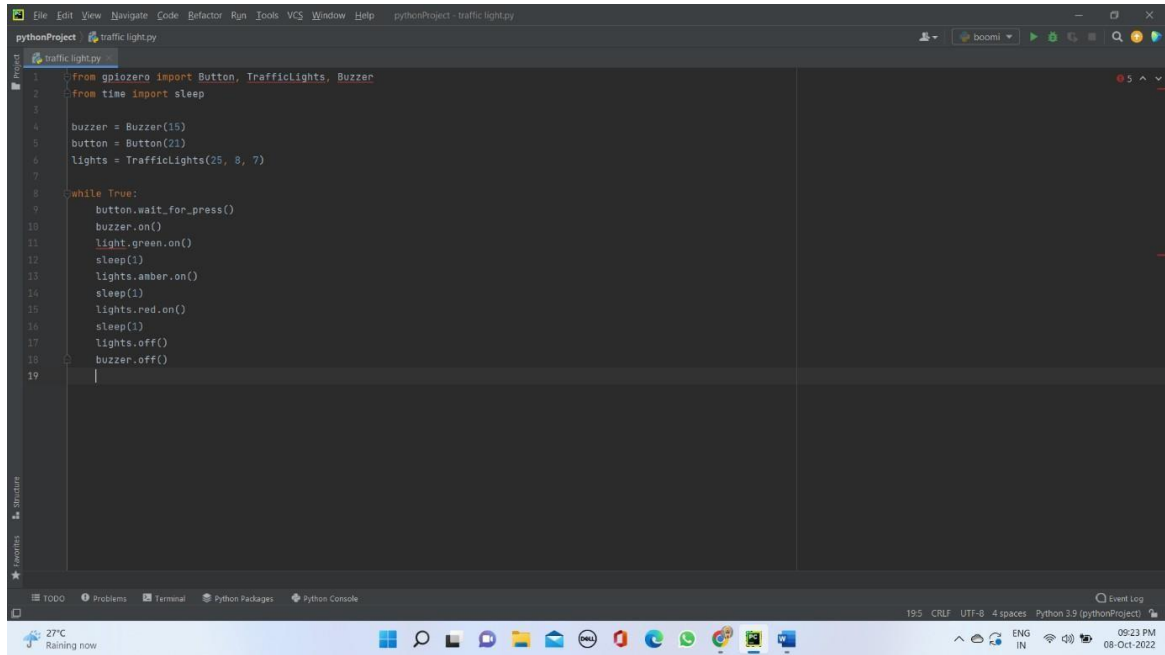
```
    lights.red.on()
```

```
    sleep(1)
```

```
    lights.off()
```

```
    buzzer.off()
```

SIMULATION:



The image shows a screenshot of a code editor window titled "pythonProject - traffic light.py". The editor displays a Python script for a traffic light simulation. The script imports necessary modules and initializes variables for a buzzer, a button, and traffic lights. It then enters a continuous loop where it waits for a button press, turns on the buzzer and green light, delays for 1 second, turns on the amber light, delays for 1 second, turns on the red light, delays for 1 second, turns off all lights, and turns off the buzzer.

```
1 from gpiozero import Button, TrafficLights, Buzzer
2 from time import sleep
3
4 buzzer = Buzzer(15)
5 button = Button(21)
6 lights = TrafficLights(25, 8, 7)
7
8 while True:
9     button.wait_for_press()
10    buzzer.on()
11    light.green.on()
12    sleep(1)
13    lights.amber.on()
14    sleep(1)
15    lights.red.on()
16    sleep(1)
17    lights.off()
18    buzzer.off()
19
```

The bottom of the image shows a Windows taskbar with the system clock displaying 09:23 PM on 08-Oct-2022. The taskbar also includes icons for various applications and system status indicators like temperature (27°C) and network connectivity.