

ASSIGNMENT III

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)
```

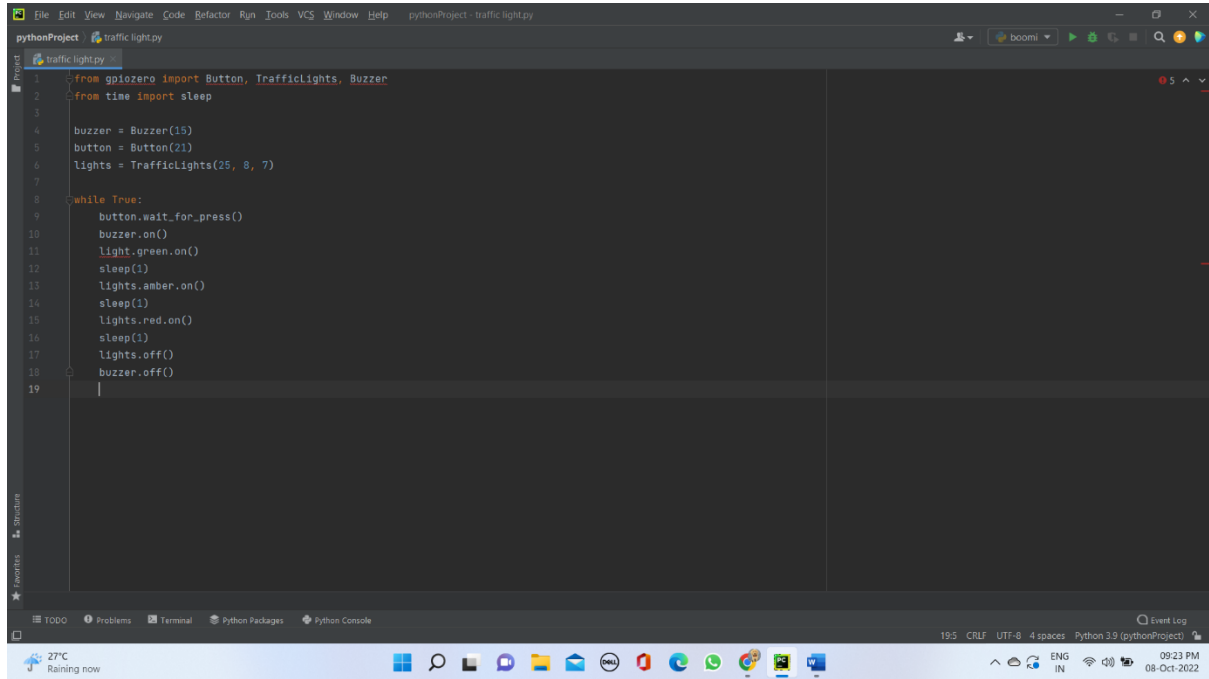
```
    lights.red.on()
```

```
    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 using the gpiozero library. The script is as follows:

```
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, 0, 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 editor interface includes a menu bar (File, Edit, View, Navigate, Code, Refactor, Run, Tools, VCS, Window, Help), a toolbar with icons for running, saving, and searching, and a sidebar on the left showing the project structure. The bottom status bar indicates the file encoding (UTF-8), indentation (4 spaces), and the Python version (Python 3.9).