

Assignment - 3
Python Programming

Assignment Date	01 October 2022
Student Name	Mr. A. Palaniyappan
Student Roll Number	811519106098
Maximum Marks	2 Marks

Question-1:

Write a program code for blinking LED and Traffic Light for Raspberry pi.

Solution:

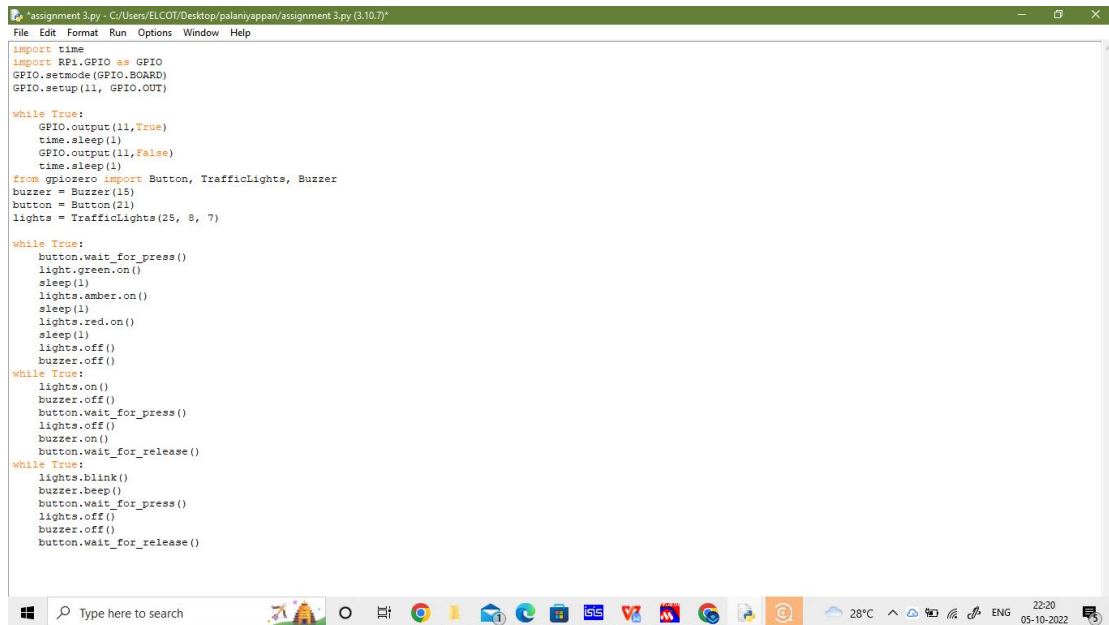
```
import time
import RPi.GPIO as GPIO
GPIO.setmode(GPIO.BOARD)
GPIO.setup(11, GPIO.OUT)

while True:
    GPIO.output(11,True)
    time.sleep(1)
    GPIO.output(11,False)
    time.sleep(1)
from gpiozero import Button, TrafficLights,
Buzzer
buzzer = Buzzer(15)
button = Button(21)
lights = TrafficLights(25, 8, 7)

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



```
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import RPi.GPIO as GPIO
GPIO.setmode(GPIO.BOARD)
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from gpiozero import Button, TrafficLights, Buzzer
buzzer = Buzzer(15)
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while True:
    button.wait_for_press()
    light.green.on()
    sleep(1)
    lights.amber.on()
    sleep(1)
    lights.red.on()
    sleep(1)
    lights.off()
    buzzer.off()

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()
```