

ASSIGNMENT – 3

PYTHON PROGRAMMING

ASSIGNMENT DATE	17 OCTOBER 2022
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MAXIMUM MARKS	2 MARKS

QUESTION – 1

Write python code for blinking LED and Traffic lights for Raspberry pi.

Solution:

```
//Code for Blinking LED//
```

```
import RPi.GPIO as GPIO
```

```
import time
```

```
LED = 40
```

```
GPIO.setwarnings(False)
```

```
GPIO.setmode(GPIO.BOARD)
```

```
GPIO.setup(LED, GPIO.OUT)
```

```
while True:
```

```
    GPIO.output(LED,GPIO.HIGH)
```

```
    time.sleep(1)
```

```
    GPIO.output(LED,GPIO.LOW)
```

```
    time.sleep(1)
```

```
//Code for Traffic Light System//
```

```
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()
```