

## **ASSIGNMENT – 3**

### **Team Members:**

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

### **FOR BLINKING LED:**

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

```
import time
```

```
ledPin = 22
```

```
def setup():
```

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

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

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

```
def loop():  
    while True:  
        print'LED on'  
        GPIO.output(ledPin,GPIO.HIGH)  
        time.sleep(1.0)  
        print'LED off'  
        GPIO.output(ledPin,GPIO.LOW)  
        time.sleep(1.0)
```

```
def endprogram():  
    GPIO.output(ledPin,GPIO.LOW)  
    GPIO.cleanup()
```

```
if __name__ == '__main__':  
    setup()  
    try:  
        loop()  
    except KeyboardInterrupt:  
        endprogram()
```

## **FOR TRAFFIC LIGHTS:**

```
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()
```

```
    lights.green.on()
```

```
    sleep(1)
```

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

```
    sleep(1)
```

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

```
    sleep(1)
```

```
    lights.off()
```

```
    buzzer.off()
```