

ASSIGNMENT -3

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Question: - Write a python code for Blinking LED and Traffic lights for Raspberry Pi.

LED Blinking: -

```
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()
```

TRAFFIC LIGHT PYTHON CODE:-

```
from gpiozero import LED
```

```
from time import sleep
```

```
red=LED(17)
```

```
yellow=LED(22)
```

```
green=LED(27)
```

```
While True:
```

```
    red.on()
```

```
    sleep(15)
```

```
    red.off()
```

```
    sleep(1)
```

```
    yellow.on()
```

```
    sleep(10)
```

```
    yellow.off()
```

```
    sleep(1)
```

```
    green.on()
```

```
    sleep(10)
```

```
    green.off()
```

```
    sleep(1)
```