PROGRAM
FOR LED

Blinking LED

```python
import RPi.GPIO as GPIO
from time import sleep

GPIO.setwarnings(False)
GPIO.setmode(GPIO.BOARD)
GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW)

while True:
 GPIO.output(8, GPIO.HIGH)
 sleep(1)
 GPIO.output(8, GPIO.LOW)
 sleep(1)

# Traffic light Simulation
import RPi.GPIO as GPIO
import time
import signal
import sys
GPIO.setmode(GPIO.BCM)
GPIO.setup(9, GPIO.OUT)
GPIO.setup(10, GPIO.OUT)
GPIO.setup(11, GPIO.OUT)
while True:
    # Red
    GPIO.output(9, True)
    time.sleep(3)
    # Red and amber
    GPIO.output(10, True)
    time.sleep(1)
    # Green
    GPIO.output(9, False)
    GPIO.output(10, False)
    GPIO.output(11, True)
    time.sleep(5)
    # Amber
    GPIO.output(11, False)
    GPIO.output(10, True)
    time.sleep(2)
    # Amber off (red comes on at top of loop)
```

```
        GPIO.output(10, False)
```

PROGRAM FOR TRAFFIC LIGHT

```python
from gpiozero import LED
from time import sleep


red= LED(17)                #pin numbers connected to Led's
aster=(22)
green=(27)


while True:
    red.on()               #RED light
    print("Red light is ON")
    for i in range(100,0,-1):
        print("Remaining time: ",i)
        sleep(1)
    red.off()

    aster.on()             # ASTER light
    print("Yellow light is ON")
    for i in range(5,0,-1):
        print("Remaining time: ",i)
        sleep(1)
    aster.off()

    green.on              #GREEN light
    print("Green light is ON")
    for i in range(30,0,-1):
        print("Remaining time: ",i)
        sleep(1)
    green.off()
```