

ASSIGNMENT -3 SUBMITTED BY SANGEETHA S BATCH B7 1A3E-IOT

PROGRAM:

1.LED BLINKING IN 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)
```

2.TRAFFIC LIGHT IN PYTHON:

```
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)
def allLightsOff(signal, frame):
    GPIO.output(9, False)
    GPIO.output(10, False)
    GPIO.output(11, False)
```

```
GPIO.cleanup()  
sys.exit(0)  
signal.signal(signal.SIGINT, allLightsOff)  
while True:  
    GPIO.output(9, True) #red  
    time.sleep(3)  
    GPIO.output(10, True) # Red and amber  
    time.sleep(1)  
    GPIO.output(9, False) # Green  
    GPIO.output(10, False)  
    GPIO.output(11, True)  
    time.sleep(5)  
    GPIO.output(11, False) # Amber  
    GPIO.output(10, True)  
time.sleep(2)  
    GPIO.output(10, False) # Amber off (red comes on at top of loop)
```