ASSIGNMENT-3

TEAM ID   : PNT2022TMID52316

NAME   :   SAHAYA HEBSIBA.S

ROLL NO   : 963519106028

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

PROGRAM:

1.LED BLINKING IN PYTHON:

```python
import RPi.GPIOasGPIO

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:

```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)
```

```python
        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)
```