ASSIGNMENT -3

Date	05 October 2022
Team ID	PNT2022TMID01185
Name	SMARTFARMER - IoT enabled smart farming applications

QUESTION:

Write python code for blinking LED and Traffic lights for Raspberry pi. Only python code is enough, no need to execute in raspberry pi. Note: you are allowed to use web search and complete the assignment

Code for LED blinking

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


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


while True:                 #infinite loop
    GP.output(8, GPIO.HIGH)         # Turn on
    print("The LED is ON")
    sleep(2)                # Sleep for 2 second

    GP.output(8, GPIO.LOW)          # Turn off
    print("The LED is OFF")
    sleep(2)                # Sleep for 2 second
```

Code for Traffic light raspberry python code

```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()
```