

Assignment -3

Python Programming

Assignment Date	08 Octoberr 2022
Student Name	Shanmugapriya D
Student Roll Number	912219104029
Maximum Marks	2 Marks

Question-1:

ASSIGNMENT TITLE:

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

Blinking LED:

```
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 s
```

Traffic Light Controller:

```
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()
```