

Assignment -3

Python Programming

Assignment Date	5 October 2022
Student Name	Saranya. G
Student Roll Number	962819106038
Maximum Marks	2 Marks

Question-1:

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

LED BLINKING CODE

```
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
```

TRAFFIC LIGHT RASBERRY PYTHON CODE

```
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()
```