

ASSIGNMENT -3

SRI SHANMUGHA COLLEGE OF ENGINEERING AND TECHNOLOGY

Question: - Write a python code for Blinking LED and Traffic lights for Raspberry Pi.

LED Blinking: -

```
import RPi.GPIO as GPIO
import time
ledPin=22
def setup():
    GPIO.setmode(GPIO.BOARD)
    GPIO.setup(ledPin,GPIO.OUT)
    GPIO.output(ledPin,GPIO.LOW)
def loop():
    While True:
        Print 'LED on'
        GPIO.output(ledPin,GPIO.HIGH)
        Time.sleep(1.0)
        Print 'LED off'
        GPIO.output(ledPin,GPIO.LOW)
        Time.sleep(1.0)
def endprogram():
    GPIO.output(ledPin,GPIO.LOW)
```

```
GPIO.cleanup()
if __name__ == '__main__':
    setup()
    try:
        loop()
    except KeyboardInterrupt:
        endprogram()
```

TRAFFIC LIGHT PYTHON CODE:-

```
from gpiozero import LED
from time import sleep
red=LED(17)
yellow=LED(22)
green=LED(27)
While True:
    red.on()
    sleep(15)
    red.off()
    sleep(1)
    yellow.on()
    sleep(10)
    yellow.off()
    sleep(1)
    green.on()
    sleep(10)
```

```
green.off()
```

```
sleep(1)
```