

Assignment 3

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)
```