

ASSIGNMENT 3

PYTHON CODE FOR BLINKING LED using raspberry pi

```
import RPi.GPIO as GPIO
import time
redLED = 2
GPIO.setmode(GPIO.BCM)
try:
    while True:
        GPIO.setup(redLED, GPIO.OUT)
        GPIO.output(redLED, True)
        time.sleep(0.8)
        GPIO.output(redLED, False)
        time.sleep(0.8)
finally:
    GPIO.cleanup()
```

PYTHON CODE FOR TRAFFIC LIGHT using raspberry pi.

```
IS_REGULAR = True
def regular():
    while True:
        if not GPIO.input(channel) and not IS_REGULAR:
            for col in [red, yel, gre]:
                col.on()
                sleep(2)
                col.off()
            if not IS_REGULAR: break
def callback(channel):
    global IS_REGULAR
```

```
IS_REGULAR = False
print('Emergency vehicle detected')
red.off()
yel.off()
gre.on()
sleep(5)
gre.off()
IS_REGULAR = True
```