**ASSIGNMENT 3**

IBM (NALAIYA THIRAN)

MEMBER NAME : U.NARMATHA

TEAM ID : PNT2022TMID50604

REG NO : 952819106017

EMAIL : [narmathau.ug19.ec@scadengineering.ac.in](mailto:narmathau.ug19.ec@scadengineering.ac.in)

**PYTHON CODE FOR BLINKING LED :**

import RPi.GPIO as GPIO

from time import sleep

GPIO.setwarnings(False)

GPIO.setmode(GPIO.BOARD)

GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW)

(off)

while True:

GPIO.output(8, GPIO.HIGH)

sleep(1)

GPIO.output(8, GPIO.LOW)

sleep(1)

**PYTHON CODE FOR TRAFFIC LIGHT**

import RPi.GPIO as GPIO

import time

import signal

import sys

# Setup

GPIO.setmode(GPIO.BCM)

GPIO.setup(9, GPIO.OUT)

GPIO.setup(10, GPIO.OUT)

GPIO.setup(11, GPIO.OUT)

# Turn off all lights when user ends demo

def allLightsOff(signal, frame):

GPIO.output(9, False)

GPIO.output(10, False)

GPIO.output(11, False)

GPIO.cleanup()

sys.exit(0)

signal.signal(signal.SIGINT, allLightsOff)

# Loop forever

while True:

# Red

GPIO.output(9, True)

time.sleep(3)

# Red and amber

GPIO.output(10, True)

time.sleep(1)

# Green

GPIO.output(9, False)

GPIO.output(10, False)

GPIO.output(11, True)

time.sleep(5)

# Amber

GPIO.output(11, False)

GPIO.output(10, True)

time.sleep(2)

# Amber off (red comes on at top of loop)

GPIO.output(10, False)