Assignment 3:

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

Only python code is enough, no need to execute in raspberry pi.

Note: you are allowed to use web search and complete the assignment.

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 its end

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 for led light

while True:

# RED LIGHT

GPIO.output(9, True)

time.sleep(3)

# RED AND YELLOW

GPIO.output(10, True)

time.sleep(1)

# GREEN LIGHT

GPIO.output(9, False)

GPIO.output(10, False)

GPIO.output(11, True)

time.sleep(5)

# YELLOW LIGHT

GPIO.output(11, False)

GPIO.output(10, True)

time.sleep(2)

#YELLOW OFF (red start from first loop)

GPIO.output(10, False)