ASSIGNMENT-3

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Question:

# Write a python code for Blinking LED and Traffic lights for Raspberry pi.

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)

while True:

GPIO.output(8,GPIO.HIGH)

sleep(1)

GPIO.output(8,GPIO.LOW)

sleep(1)

Traffic Lights:

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)