|  |  |
| --- | --- |
| Assignment Date | 06 October 2022 |
| Student Name | Gayathri M S |
| Student Roll Number | 113119UG04028 |

**ASSIGMNENT-III**

**QUESTION:**

Write python code for blinking LED and traffic light for Raspberry pi.

**PYTHON CODE FOR BLINKING LED:**

import RPI.GPIO as GPIO

from time import sleep

GPIO.setwarnings(False)

GPIO.setmode(GPIO.BOARD)

GPIO.setup(7, GPIO.OUT, initial=GPIO.LOW)

while True:

GPIO.output(7, GPIO.HIGH)

print("LED on")

sleep(1)

GPIO.output(7, GPIO.LOW)

print("LED off")

sleep(1)

**PYTHON CODE FOR TRAFFIC LIGHT:**

import RPI.GPIO as GPIO

import time

import signal

import sys

GPIO.setmode(GPIO.BCM)

GPIO.setup(9, GPIO.OUT)

GPIO.setup(10, GPIO.OUT)

GPIO.setup(11, GPIO.OUT)

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)

while True:

# Red

GPIO.output(9, True)

time.sleep(3)

# 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)GPIO.output(10, False)

GPIO.output(11, False)

GPIO.cleanup()

sys.exit(0)