**ASSIGNMENT 3**

| **ASSIGNMENT DATE** | **09 OCTOBER 2022** |
| --- | --- |
| **STUDENT NAME** | **Pugazhmathi R** |
| **STUDENT ROLL NUMBER** | **910019106031** |
| **MAXIMUM MARKS** | **2 marks** |

**QUESTION:** WRITE A PYTHON CODE FOR BLINKING LED AND TRAFFIC LIGHT FOR RASPBERRY PI.

**CODE:**

#Python program for blinking LED on Raspberry Pi

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)