**Assignment -3**

Python Programming

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| Assignment Date | 06 October 2022 |
| Student Name | Mr. Sarath Vignesh A |
| Student Roll Number | 2019504581 |
| Maximum Marks | 2 Marks |

**Question-1:**

Write python code for blinking LED in Raspberry pi

**Solution:**

**#importing necessary libraries**

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)

sleep(3)

GPIO.output(7, GPIO.LOW)

sleep(3)

**Question-2:**

Write python code for Traffic Lights in raspberry pi

**Solution:**

**#importing necessary libraries**

import RPI.GPIO as gpio

from time import sleep

RED\_PIN = 25

YELLOW\_PIN =8

GREEN\_PIN =7

gpio.setwarnings(FALSE)

gpio.setmode(gpio.BOARD)

def set\_red\_light():

gpio.output(RED\_PIN, gpio.HIGH)

gpio.output(YELLOW\_PIN, gpio.LOW)

gpio.output(GREEN\_PIN, gpio.LOW)

def set\_yellow\_light():

gpio.output(RED\_PIN, gpio.LOW)

gpio.output(YELLOW\_PIN, gpio.HIGH)

gpio.output(GREEN\_PIN, gpio.LOW)

def set\_green\_light():

gpio.output(RED\_PIN, gpio.LOW)

gpio.output(YELLOW\_PIN, gpio.LOW)

gpio.output(GREEN\_PIN, gpio.HIGH)

def trafficSignl():

while True:

set\_red\_light() # block traffic for 10 seconds

sleep(10)

set\_yellow\_light() # yellow for 2 seconds

sleep(2)

set\_green\_light()

sleep(5) # allow traffic for 5 seconds