

## **ASSIGNMENT – 3**

### **PYTHON PROGRAMMING WITH RASPBERRY PI**

Assignment Date	30 September 2022
Student Name	K SATHISHKUMAR
Student Roll Number	212219040142
Maximum Marks	2 Marks

#### **Question:**

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

#### **Code:**

##### **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)
    sleep(3)
    GPIO.output(7, GPIO.LOW)
    sleep(3)
```

##### **Traffic Lights:**

```
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 trafficSignal():
    while True:
        set_red_light()
        sleep(10)
        set_yellow_light()
        sleep(2)
        set_green_light()
        sleep(5)
```