

### Assignment -3

#### IoT-Based Industry - Real-Time River Water Quality

#### Python Programming

<b>Assignment Date</b>	13 October,2022
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<b>Maximum Marks</b>	2 Marks

#### Problem statement:

#### **BLINKING OF LED AND TRAFFIC LIGHTS FOR RASPBERRY PI**

#### **Solution:**

#### **Python code:**

```
# Blink an LED

import RPi.GPIO as gpio

from time import sleep

gpio.setwarnings(False)

gpio.setmode(GPIO.BOARD)

gpio.setup(23, GPIO.OUT, initial=GPIO.LOW)

while True:

    gpio.output(23, GPIO.HIGH)

    sleep(1)

    gpio.output(23, GPIO.LOW)

    sleep(1)

# Traffic Light

import RPi.GPIO as gpio

from time import sleep
```

```
gpio.setwarnings(False)

gpio.setmode(GPIO.BOARD)

gpio.setup(23, GPIO.OUT, initial=GPIO.LOW) # Red
gpio.setup(24, GPIO.OUT, initial=GPIO.LOW) # Yellow
gpio.setup(25, GPIO.OUT, initial=GPIO.LOW) # Green

while True:

    gpio.output(23, GPIO.HIGH)

    sleep(50)

    gpio.output(24, GPIO.HIGH)

    sleep(5)

    gpio.output(23, GPIO.LOW)

    sleep(5)

    gpio.output(24, GPIO.LOW)

    gpio.output(25, GPIO.HIGH)

    sleep(50)

    gpio.output(25, GPIO.LOW)

    gpio.sleep(1)
```