**ASSIGNMENT – 3**

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| **Date:** | **08 October 2022** |
| **Team ID** | **PNT2022TMID14819** |
| **Project** | **Real-Time River Water Quality Monitoring and Control System** |

**LED BLINK:**

import RPi.GPIO as GPIO

from time import sleep

#initialization

GPIO.setwarnings(False)

GPIO.setmode(GPIO.BOARD)

GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW)

#Blinking

while True:

GPIO.output(8, GPIO.HIGH)

sleep(1)

GPIO.output(8, GPIO.LOW)

sleep(1)

**Traffic Light:**

import RPi.GPIO as GPIO

import time

import signal

import sys

#Setup

GPIO.setmode(GPIO.BCM)

GPIO.setup(8, GPIO.OUT)

GPIO.setup(9, GPIO.OUT)

GPIO.setup(10, GPIO.OUT)

#loop for the traffic light function

while True:

# Red

GPIO.output(8, True)

time.sleep(3)

# Yellow before green

GPIO.output(8, False)

GPIO.output(9, True)

time.sleep(1)

# Green

GPIO.output(8, False)

GPIO.output(9, False)

GPIO.output(10, True)

time.sleep(5)

# Yellow

GPIO.output(10, False)

GPIO.output(9, True)

time.sleep(2)

# Yellow going off before red begins

GPIO.output(10, False)