ASSIGNMENT-3

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Project Name	**Real-Time River Water Quality Monitoring and Control System**
Marks	**2marks**

Python code for blinking LED in Raspberry Pi.

```
import RPi.GPIO as GPIO
import time

LED_PIN = 17

GPIO.setmode(GPIO.BCM)
GPIO.setup(LED_PIN, GPIO.OUT)

while True:
    GPIO.output(LED_PIN, GPIO.HIGH)
    time.sleep(1)
    GPIO.output(LED_PIN, GPIO.LOW)
    time.sleep(1)

GPIO.cleanup()
```

Python code for Traffic Light in Raspberry Pi

```
import RPi.GPIO as GPIO
import time
import signal
import sys

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)
```

```
while True:
    GPIO.output(9,True)
    time.sleep(3)
    GPIO.output(10,True)
    time.sleep(1)
    GPIO.output(9,True)
    GPIO.output(10,True)
    GPIO.output(11,True)
    time.sleep(5)
    GPIO.output(11,True)
    GPIO.output(10,True)
    time.sleep(2)
    GPIO.output(10,False)
```