

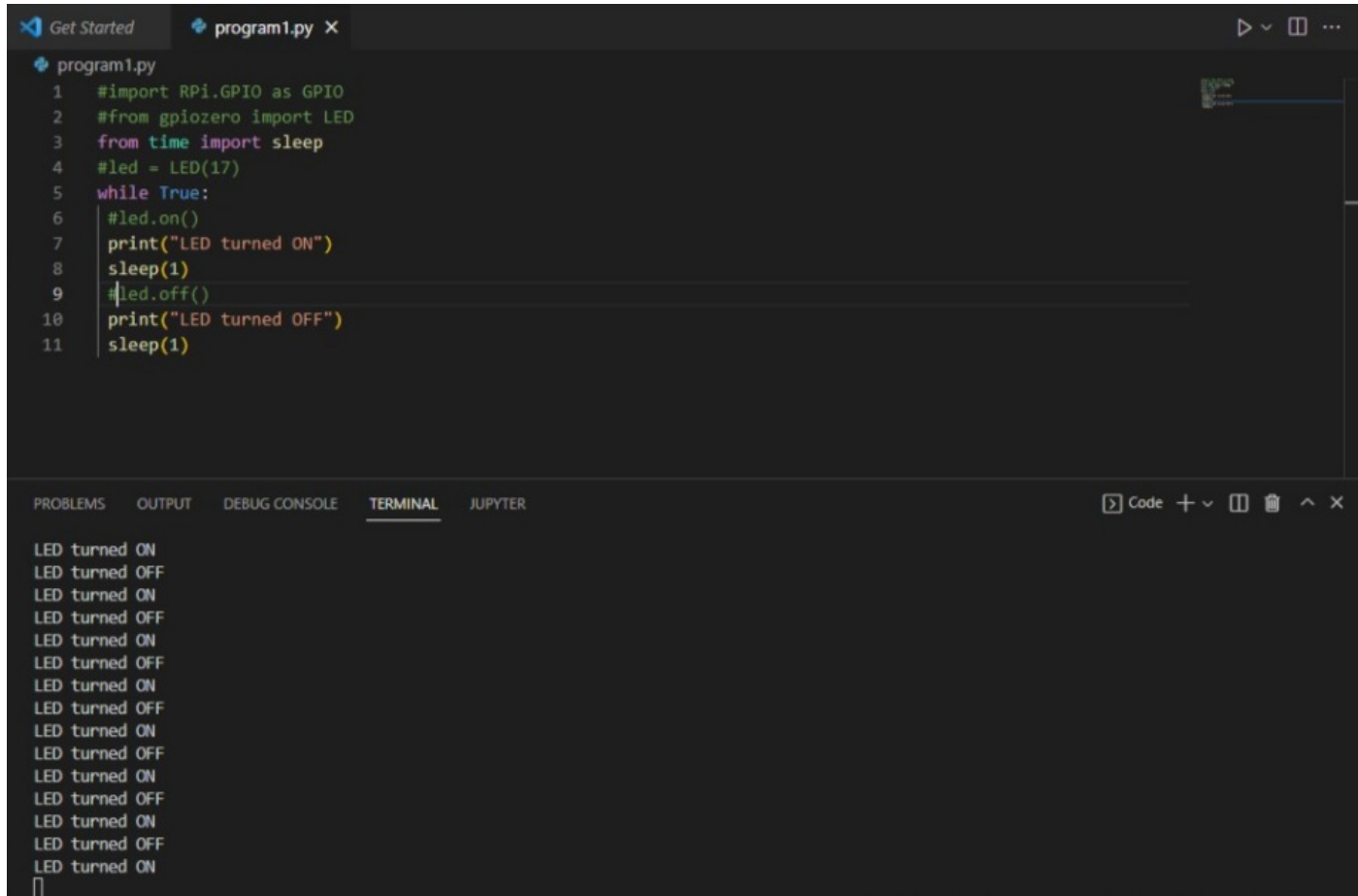
Real-Time River Water Quality Monitoring And Control System

ASSIGNMENT-3

Write a python code for blinking LED and Traffic Lights for Raspberry Pi.

(i) Python Code for Blinking LED:

```
#import RPi.GPIO as GPIO
#from gpiozero import LED
from time import sleep
#led = LED(17) while True:
#led.on() print("LED turned ON")
sleep(1)
#led.off()
print("LED turned OFF")
sleep(1)
```



```
program1.py
1  #import RPi.GPIO as GPIO
2  #from gpiozero import LED
3  from time import sleep
4  #led = LED(17)
5  while True:
6      #led.on()
7      print("LED turned ON")
8      sleep(1)
9      #led.off()
10     print("LED turned OFF")
11     sleep(1)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

LED turned ON
LED turned OFF
LED turned ON
LED turned OFF
LED turned ON
LED turned OFF
LED turned ON
LED turned OFF
LED turned ON
LED turned OFF
LED turned ON
LED turned OFF
LED turned ON
LED turned OFF
LED turned ON
LED turned OFF
LED turned ON

(ii) Python Code for Traffic Lights:

from gpiozero import Button, TrafficLights, Buzzer

from time import sleep

buzzer = Buzzer(15)

button = Button(21)

lights = TrafficLights(25, 8, 7)

while True:

 button.wait_for_press()

 buzzer.on()

 light.green.on()

sleep(1)

lights.amber.on()

sleep(1)

lights.red.on()

sleep(1)

lights.off()

buzzer.off()