

UPDATED SPRINT 1

PROJECT DEVELOPMENT PHASE

Date	17 November 2022
Team ID	PNT2022TMID49552
Project Name	Real Time River Water Quality Monitoring and Control system.

FIND THE PH LEVEL OF WATER

Program:

```
import time
```

```
import sys
```

```
import ibmiotf.application
```

```
import ibmiotf.device
```

```
#Provide your IBM Watson Device Credentials
```

```
organization = "6wqo2k"
```

```
deviceType = "python"
```

```
deviceId = "6056"
```

```
authMethod = "token"
```

```
authToken = "Visalakshi6056"
```

```
try:
```

```
deviceOptions = {"org": organization, "type":  
deviceType, "id": deviceId, "auth-method": authMethod,  
"auth-token": authToken}
```

```
deviceCli = ibmiotf.device.Client(deviceOptions)
```

```
#.....
```

```
except Exception as e:
```

```
    print("Caught exception connecting device: %s" %  
str(e))
```

```
    sys.exit()
```

```
# Connect and send a datapoint
```

```
deviceCli.connect()
```

```
while True:
```

```
    print("\nInput must given between the range of 0 to 14  
\nSensor sensing the ph value is") #Unavailable of sensors  
in the wokwi and tinkercad, we give inputs manually
```

```
    detect = input()
```

```
    Sensing =()
```

```
    if detect == "7": #The ph level of water is sensing by Ph  
sensor
```

```
        Sensing = "Drinking water"
```

```
elif detect == "6": #The ph level of water is sensing by Ph  
sensor
```

```
    Sensing = "Acid water"
```

```
elif detect == "9": #The ph level of water is sensing by  
ph sensor
```

```
    Sensing = "Base water"
```

```
else:
```

```
    Sensing = "ph is not detected"
```

```
data = { 'Sensing' : Sensing }
```

```
    #print data
```

```
def myOnPublishCallback():
```

```
    print ("Published Sensing data is %s " % Sensing, "to  
IBM Watson")
```

```
    success = deviceCli.publishEvent("IoTSensor", "json",  
data, qos=0, on_publish=myOnPublishCallback)
```

```
if not success:
```

```
    print("Not connected to IoTTF")
```

```
time.sleep(1)
```

Disconnect the device and application from the cloud
deviceCli.disconnect()