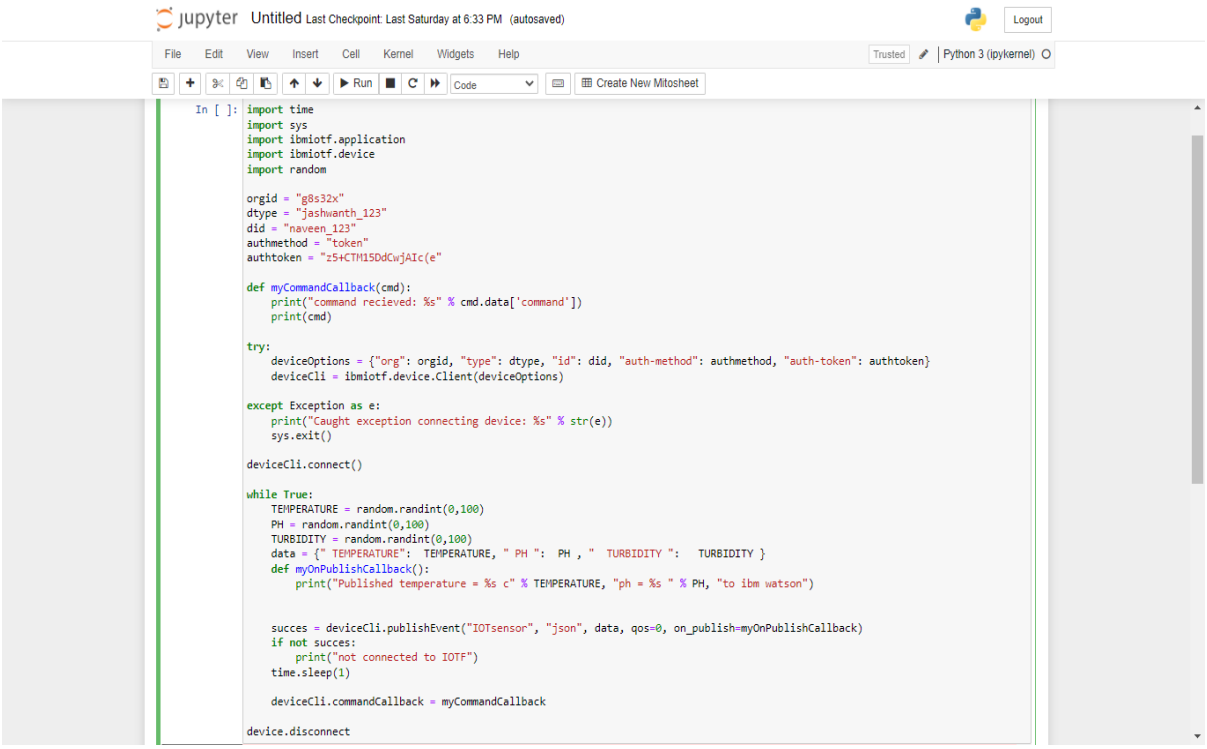
Project Development Phase
Sprint-2

Team ID	PNT2022TMID22083
Project Name	Real-Time River Water Quality Monitoring and Control System

Developed the python script:

Developed the python script to connect the iot device with the python script.

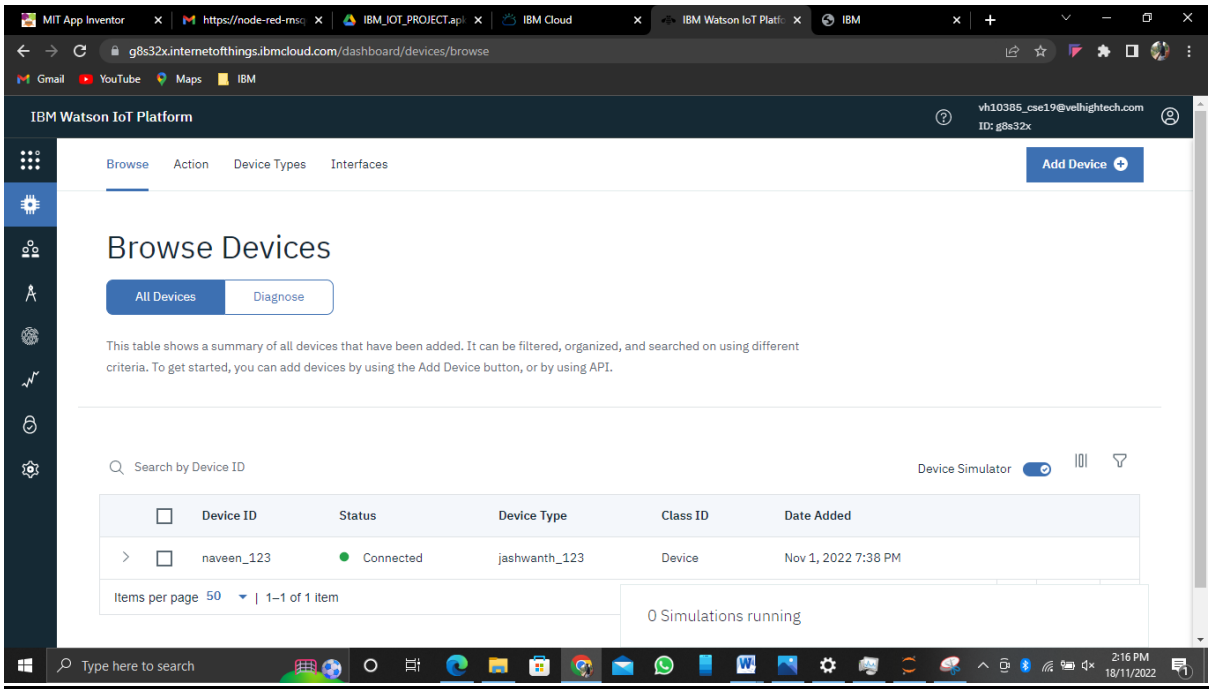


Python code:

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random
orgid = "g8s32x"
```

```
dtype = "jashwanth_123"

did = "naveen_123"

authmethod = "token"

authtoken = "z5+CTM15DdCwjAIc(e"

def myCommandCallback(cmd):

   print("command recieved: %s" % cmd.data['command'])

   print(cmd)

try:

   deviceOptions = {"org": orgid, "type": dtype, "id": did, "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()

deviceCli.connect()

while True:

   TEMPERATURE = random.randint(0,100)

   PH = random.randint(0,100)

   TURBIDITY = random.randint(0,100)

   data = {" TEMPERATURE":  TEMPERATURE, " PH ":  PH , "  TURBIDITY ":   TURBIDITY }

   def myOnPublishCallback():

      print("Published temperature = %s c" % TEMPERATURE, "ph = %s " % PH, "to ibm
watson"

    succes = deviceCli.publishEvent("IOTsensor", "json", data, qos=0,
on_publish=myOnPublishCallback)

   if not succes:

      print("not connected to IOTF")

   time.sleep(1)

 deviceCli.commandCallback = myCommandCallback

device.disconnect
```

Connected the IBM IOT WATSON platform with python code:



Transmitted the datas from python code to ibm iot Watson platform: