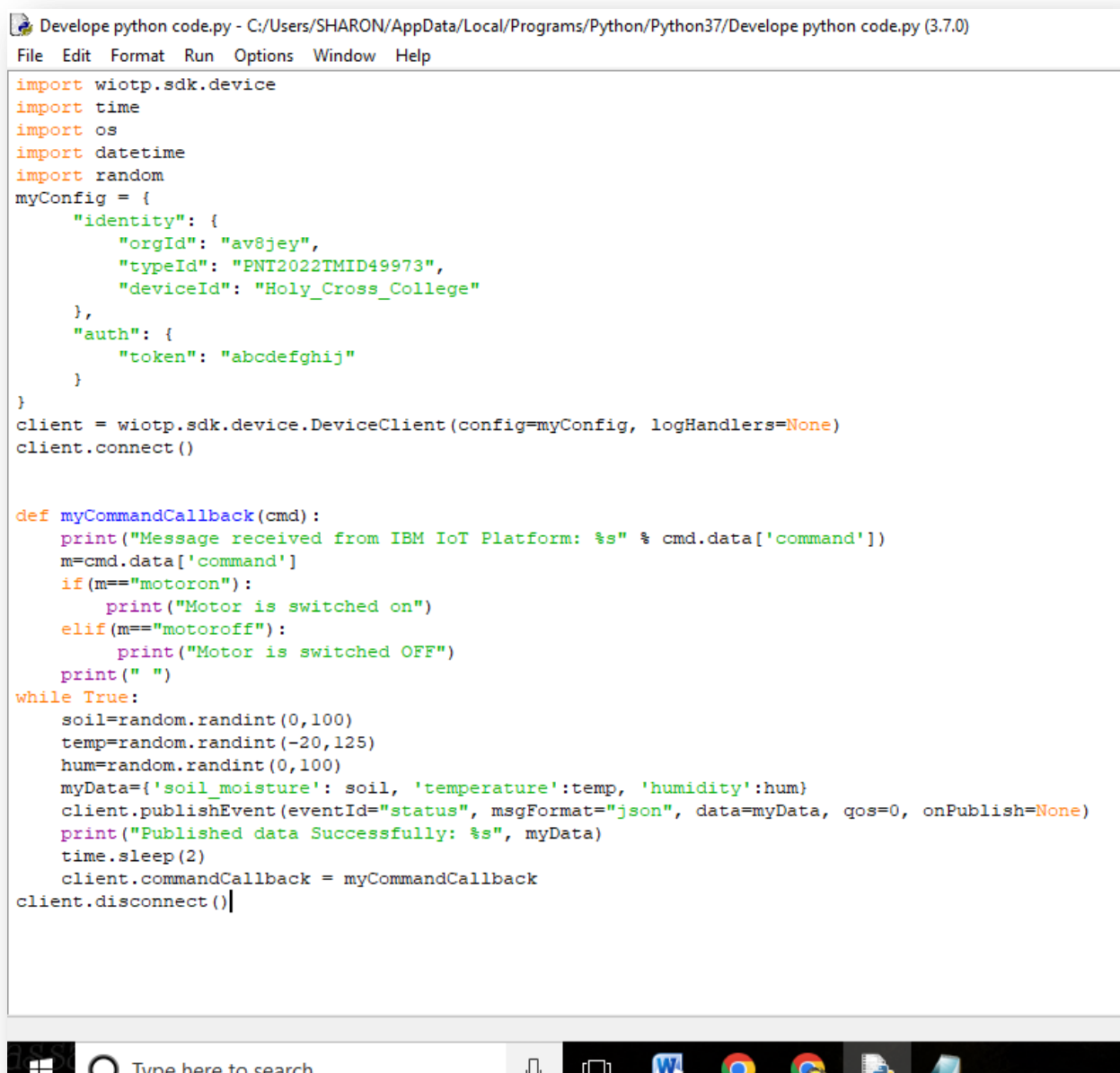


TEAM ID	PNT2022TMID49973
PROJECT	Smartfarmer – IoT Enabled Smart Farming Application
TEAM MEMBERS	Jenitaaa Sharon(TL), Jeya, Jency, Josephine Florence

IBM IoT platform credentials are given here in the Python code to connect IBM IoT to code



```
Develope python code.py - C:/Users/SHARON/AppData/Local/Programs/Python/Python37/Develope python code.py (3.7.0)
File Edit Format Run Options Window Help

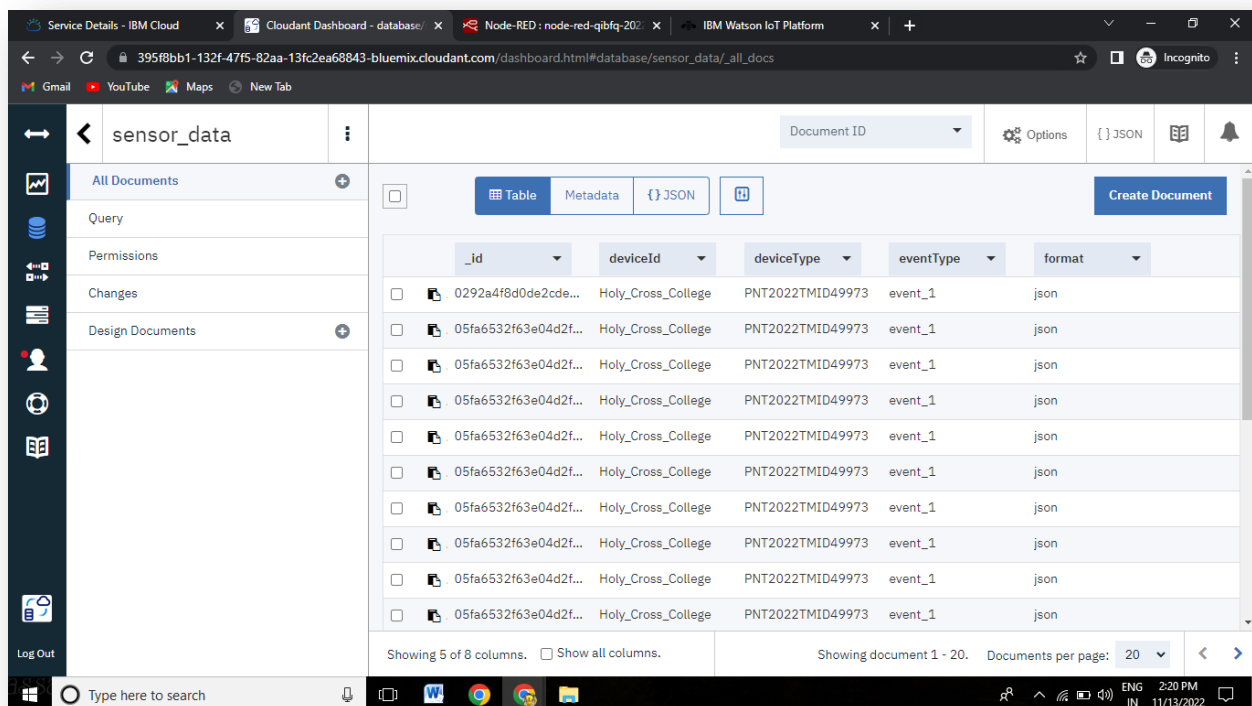
import wiotp.sdk.device
import time
import os
import datetime
import random
myConfig = {
    "identity": {
        "orgId": "av8jey",
        "typeId": "PNT2022TMID49973",
        "deviceId": "Holy_Cross_College"
    },
    "auth": {
        "token": "abcdefghij"
    }
}
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']
    if(m=="motoron"):
        print("Motor is switched on")
    elif(m=="motoroff"):
        print("Motor is switched OFF")
    print(" ")
while True:
    soil=random.randint(0,100)
    temp=random.randint(-20,125)
    hum=random.randint(0,100)
    myData={'soil_moisture': soil, 'temperature':temp, 'humidity':hum}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Published data Successfully: %s", myData)
    time.sleep(2)
    client.commandCallback = myCommandCallback
client.disconnect()
```

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```
Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:/Users/SHARON/AppData/Local/Programs/Python/Python37/Develo python
code.py
2022-11-11 15:38:15,569 wiotp.sdk.device.client.DeviceClient INFO Connecte
d successfully: d:av8jey:PNT2022TMID49973:Holy_Cross_CollegePublished data Succe
ssfully: %s
{'soil_moisture': 44, 'temperature': 117, 'humidity': 85}
Published data Successfully: %s {'soil_moisture': 17, 'temperature': 80, 'humidi
ty': 5}
Published data Successfully: %s {'soil_moisture': 86, 'temperature': 45, 'humidi
ty': 42}
Published data Successfully: %s {'soil_moisture': 87, 'temperature': 51, 'humidi
ty': 100}
Published data Successfully: %s {'soil_moisture': 82, 'temperature': 98, 'humidi
ty': 91}
Published data Successfully: %s {'soil_moisture': 62, 'temperature': 50, 'humidi
ty': 99}
```

The above data will be stored in the database of IBM cloudant dashboard



The screenshot shows the IBM Cloudant Dashboard interface. The left sidebar contains navigation options: All Documents, Query, Permissions, Changes, and Design Documents. The main area displays a table of documents under the 'sensor_data' collection. The table has columns for _id, deviceId, deviceType, eventType, and format. The data shows multiple documents from the device 'Holy_Cross_College' with deviceType 'PNT2022TMID49973' and eventType 'event_1'. The format for all documents is 'json'.

_id	deviceId	deviceType	eventType	format
0292a4f8d0de2cde...	Holy_Cross_College	PNT2022TMID49973	event_1	json
05fa6532f63e04d2f...	Holy_Cross_College	PNT2022TMID49973	event_1	json
05fa6532f63e04d2f...	Holy_Cross_College	PNT2022TMID49973	event_1	json
05fa6532f63e04d2f...	Holy_Cross_College	PNT2022TMID49973	event_1	json
05fa6532f63e04d2f...	Holy_Cross_College	PNT2022TMID49973	event_1	json
05fa6532f63e04d2f...	Holy_Cross_College	PNT2022TMID49973	event_1	json
05fa6532f63e04d2f...	Holy_Cross_College	PNT2022TMID49973	event_1	json
05fa6532f63e04d2f...	Holy_Cross_College	PNT2022TMID49973	event_1	json
05fa6532f63e04d2f...	Holy_Cross_College	PNT2022TMID49973	event_1	json
05fa6532f63e04d2f...	Holy_Cross_College	PNT2022TMID49973	event_1	json

PNT2022TMID49973

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