

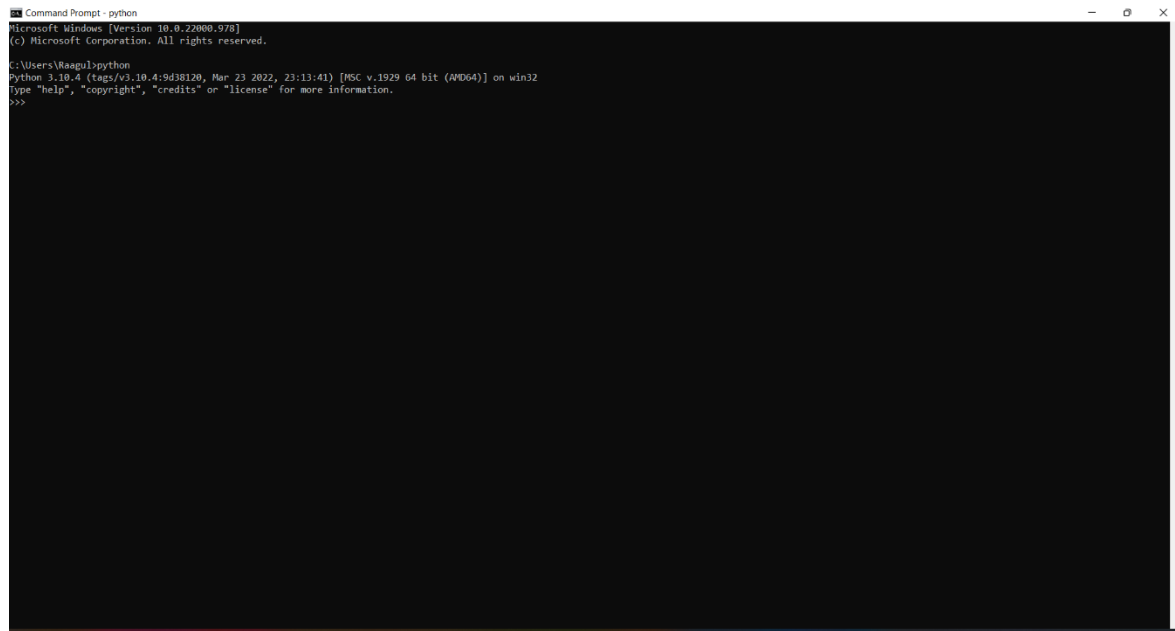
PROJECT DEVELOPMENT PHASE

Sprint - 2

TEAM ID : PNT2022TMID08447

PROJECT NAME : Smart Farmer - IoT Enabled Smart Farming

Install python, if install means check in cmd..



```
Command Prompt - python
Microsoft Windows [Version 10.0.22000.978]
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C:\Users\Raagul>python
Python 3.10.4 (tags/v3.10.4:9d38120, Mar 23 2022, 23:13:41) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
```

This code is used for connect the IBM Watson Iot platform.

Coding:

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random
```

```
#Provide your IBM Watson Device Credentials
organization = "bnsfkk"
deviceType ="Weather_Monitor"
deviceId = "weather"
authMethod = "token"
authToken = "weatherravi"
```

```
# Initialize GPIO
```

```
temp=random.randint(0,100)
pulse=random.randint(0,100)
oxygen= random.randint(0,100)
lat = 17
lon = 18
```

```
def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    print(cmd)
```

```
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 "hello" with value "world" into the cloud as an event of type
"greeting" 10 times
deviceCli.connect()

while True:
#Get Sensor Data from DHT11

    data = {"d":{ 'temp' : temp, 'pulse': pulse , 'oxygen': oxygen, 'lat':lat, 'lon':lon}} #print data
def myOnPublishCallback():
    print ("Published Temperature = %s C" % temp, "Humidity = %s %" % pulse, "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)

deviceCli.commandCallback = myCommandCallback


# Disconnect the device and application from the cloud
deviceCli.disconnect()
IBM Watson IoT Platform..

```

All Devices Diagnose

🔍 Search by Device ID

Device Simulator

<input type="checkbox"/>	Device ID	Status	Device Type	Class ID	Date Added	
> <input type="checkbox"/>	weater	 Disconnected	Weather_Monitor	Device	10 Nov 2022 16:17	→ ...

Items per page 50 | 1–1 of 1 item

1 of 1 page < 1 >