

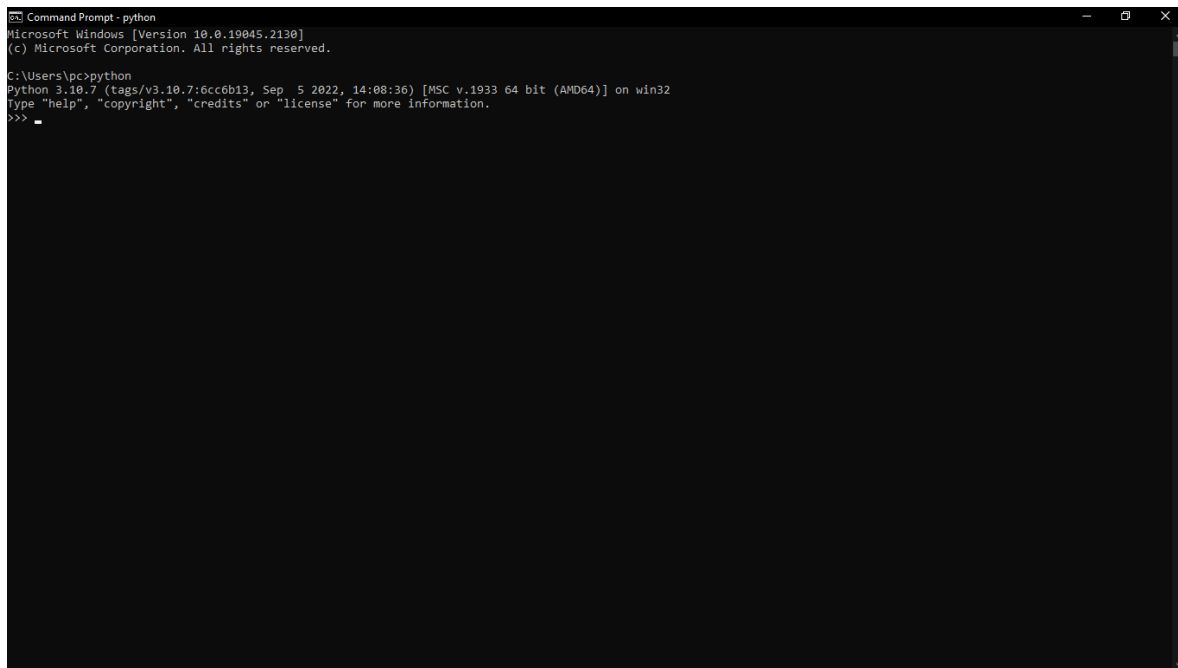
PROJECT DEVELOPMENT PHASE

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 10.0.19045.2130]
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C:\Users\pc>python
Python 3.10.7 (tags/v3.10.7:6cc6b13, Sep  5 2022, 14:08:36) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> _
```

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

Coding:

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

#Provide your IBM Watson Device Credentials
organization = "sjoxp0"
deviceType = "Weather_Monitor"
deviceId = "weater"
authMethod = "token"
authToken = "ajithbalajimageshsridhar"

# 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 IoT")

        time.sleep(1)

    deviceCli.commandCallback = myCommandCallback

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

IBM Watson IoT Platform..



Diagnose

🔍 Search by Device ID

Device Simulator ☒

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

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