

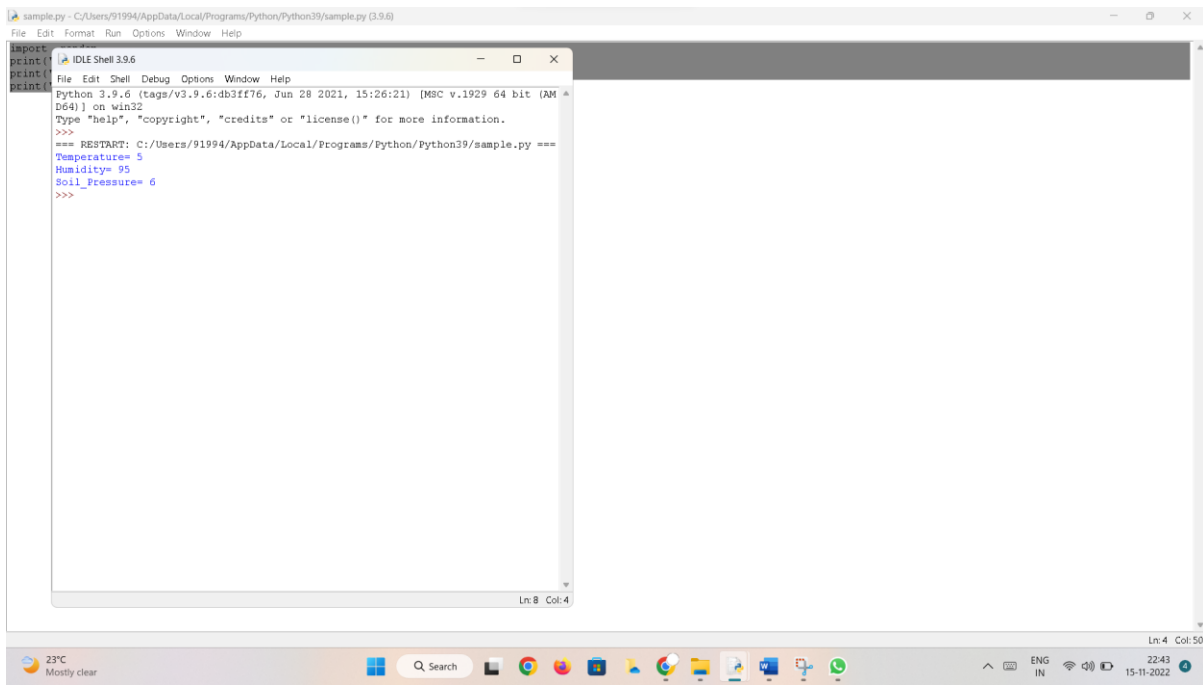
PYTHON CODE (TEMPERATURE, HUMIDITY, SOIL MOISTURE)

Date	31 October 2022
Team ID	PNT2022TMID26635
Project Name	IoT based Smart Crop Protection for Agriculture

PYTHON CODE

```
import random  
print('Temperature=',str(random.randint(0,100)))  
print('Humidity=',str(random.randint(0,100)))  
print('Soil Moisture=',str(random.randint(0,100)))
```

OUTPUT:

A screenshot of a Python IDE window titled 'sample.py - C:/Users/91994/AppData/Local/Programs/Python/Python39/sample.py (3.9.6)'. The IDE shows the code from the previous block. The output console displays the following results: 'Temperature= 5', 'Humidity= 95', and 'Soil_Pressure= 6'. The status bar at the bottom indicates 'Ln: 8 Col: 4' and 'Ln: 4 Col: 50'. The system tray at the bottom shows a temperature of 23°C, 'Mostly clear', and the date '15-11-2022'.

Service Details x IBM Watson IoT x Application Details x Node-RED: node... x IBM x IBM-EPBL/IBM x IBM x Node-RED: D x New Tab x +

995kq7.internetofthings.ibmcloud.com/dashboard/devices/browse

IBM Watson IoT Platform 2129319106033@smartinternaz.com ID: 995kq7

Browse Action Device Types Interfaces Add Device +

26635 Disconnected Test_Device_Type Device Nov 14, 2022 7:59 PM

Identity Device Information Recent Events State Logs

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
status	{*temperature*:99,*humidity*:98,*soil_moistur...	json	a few seconds ago
status	{*temperature*:-9,*humidity*:28,*soil_moisture...	json	a few seconds ago
status	{*temperature*:112,*humidity*:87,*soil_moistu...	json	a few seconds ago
status	{*temperature*:40,*humidity*:87,*soil_moistur...	json	a few seconds ago
status	{*temperature*:64,*humidity*:29,*soil_moistur...	json	a few seconds ago

Test_Device_Type_1 Disconnected Test_Device_Type Device 2 Simulations running

23°C Mostly clear 22:34 15-11-2022

Service Details x IBM Watson IoT x Application Details x Node-RED: node... x IBM x IBM-EPBL/IBM x Node-RED: Dash... x New Tab x +

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Browse Action Device Types Interfaces

Browse Devices

All Devices Diagnose

This table shows a summary of all devices that have been added. It can be filtered, organized, and searched on using different criteria. To get started, you can add devices by using the Add Device button, or by using API.

Search by Device ID

Device ID	Status	Device Type	Class ID
26635	Connected	Test_Device_Type	Device
Test_Device_Type_1	Connected	Test_Device_Type	Device

Items per page 50 | 1-2 of 2 items

Device Type: Test_Device_Type

Events 1 New event type +

Event type name event_1 Send

Schedule 20 Every Minute

Payload Specify the event payload in the editor window or by uploading a CSV file.

```
0 {
1   "Temperature": random(0, 100),
2   "Humidity": random(0, 100),
3   "Soil_Moisture": random(0, 100),
4 }
5
```

Upload a CSV file Cancel Save

Microsoft Store

23°C Mostly clear 22:39 15-11-2022