

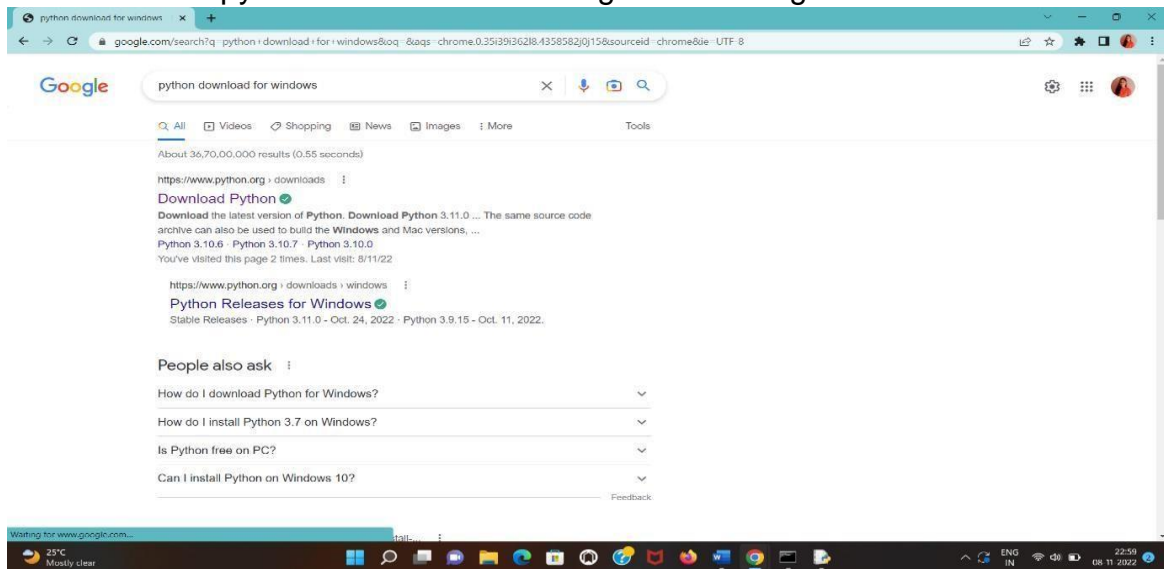
PYTHON SCRIPT

AIM:

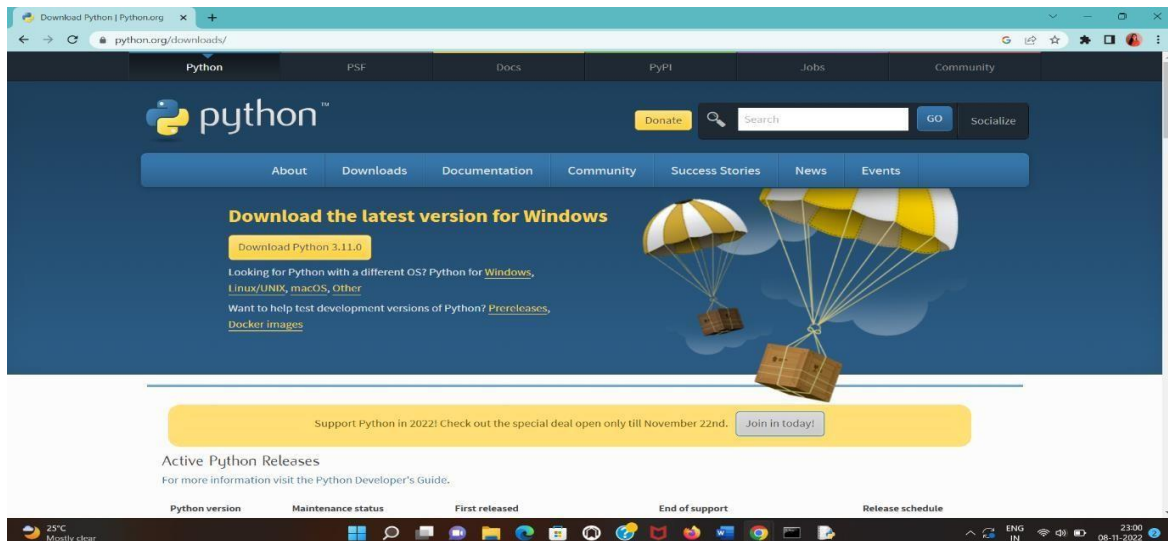
To install python version 3.9.6 and IBM Watson IoT platform packages in python.

STEPS:

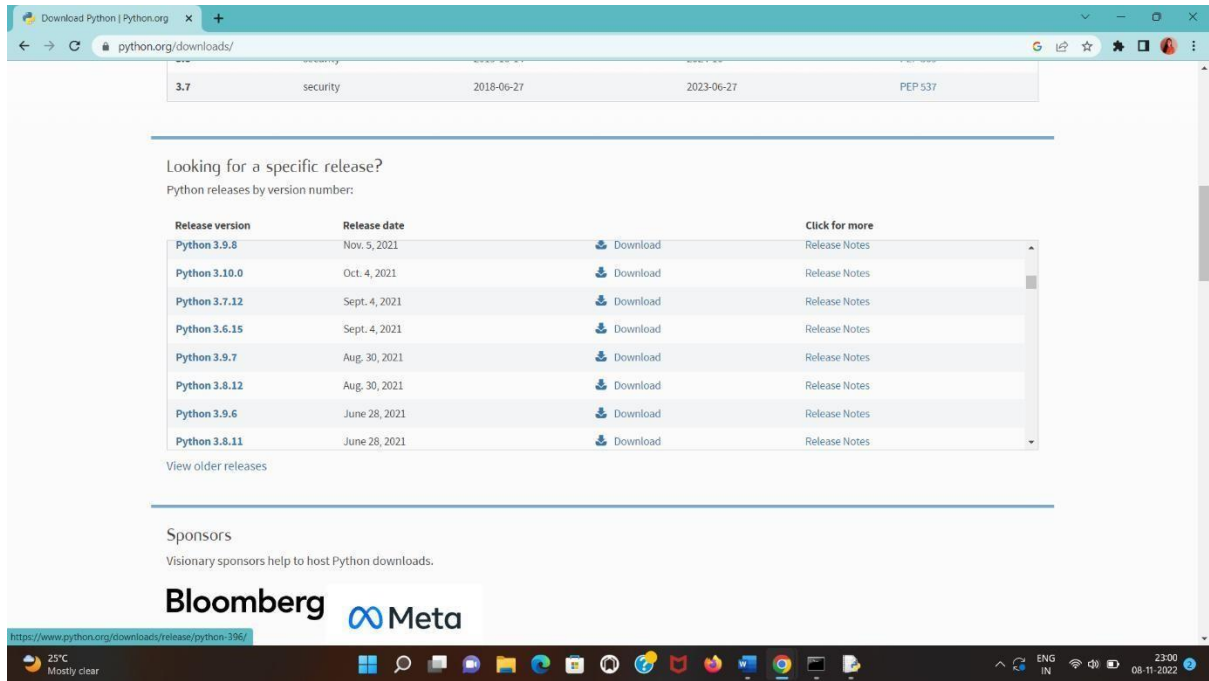
1. Search for python for windows in Google search engine.



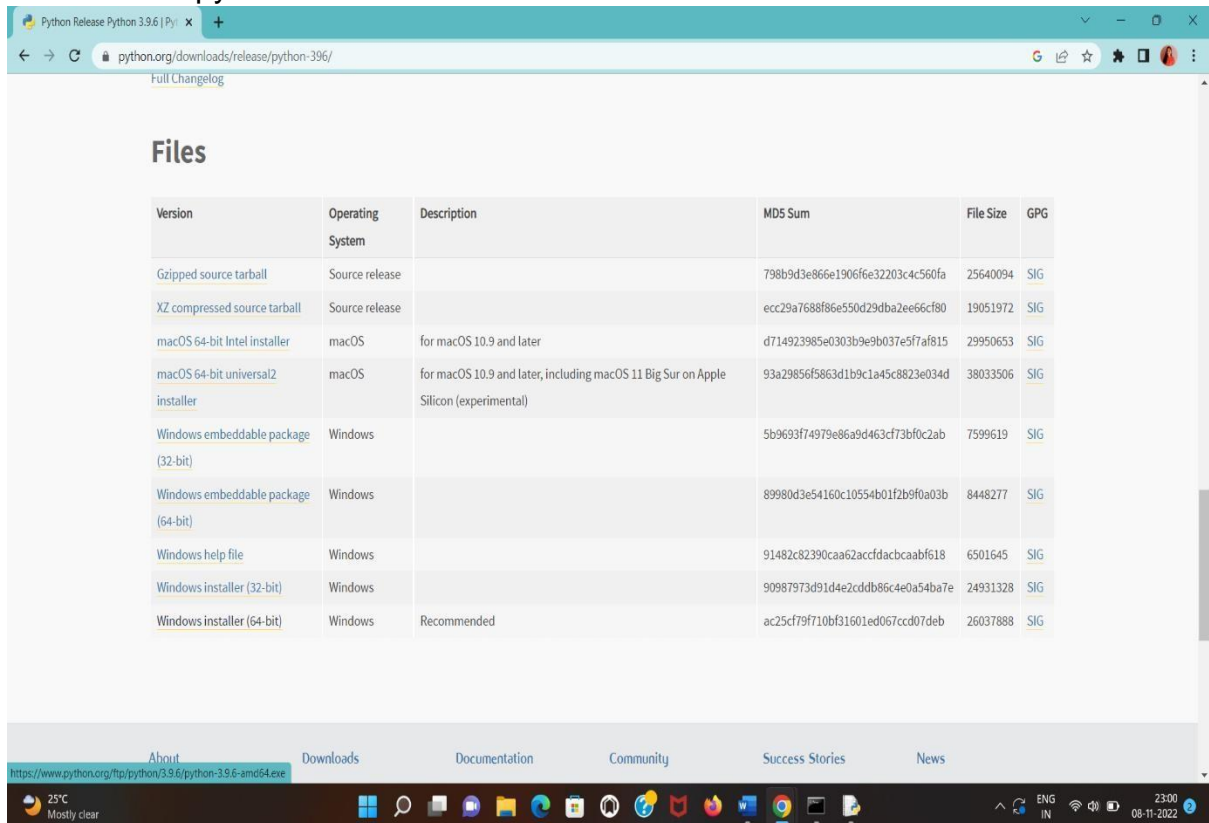
2. Click the First link..



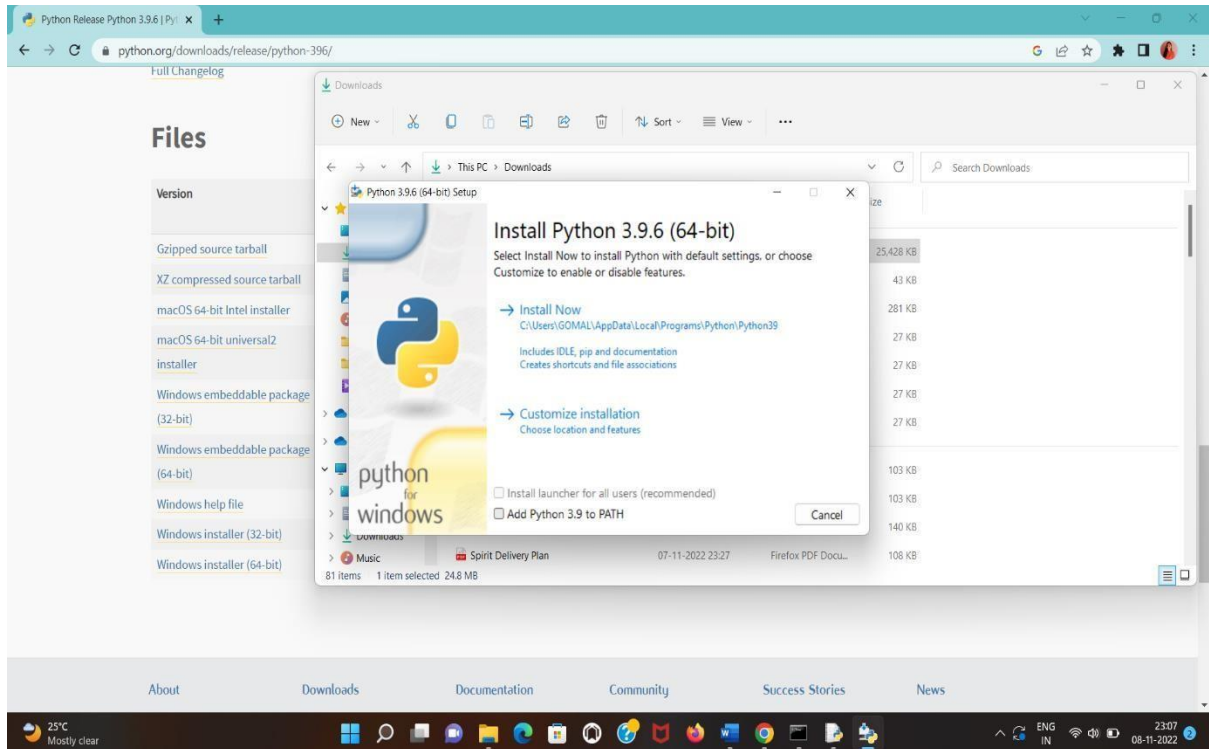
3. Search for python 3.9.6 version which is suitable for IBM Watson platform.



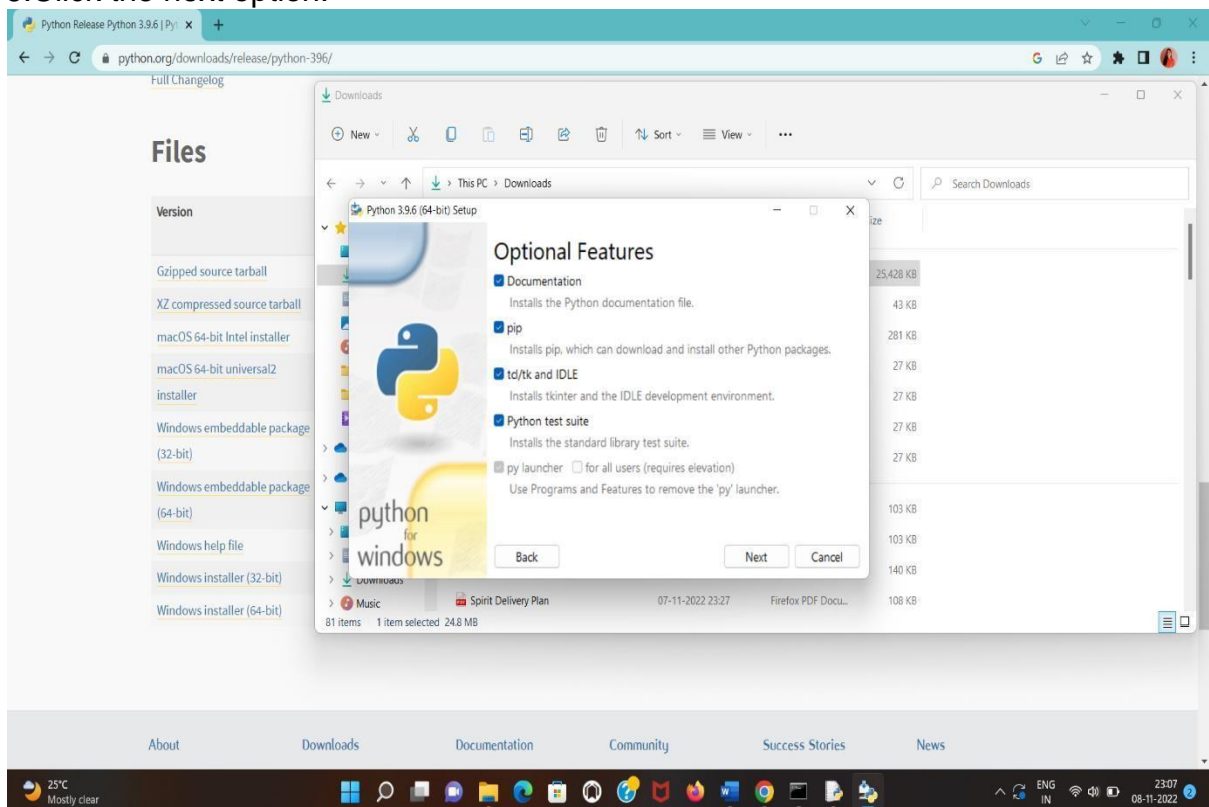
4. Click the python version 3.9.6 and download.



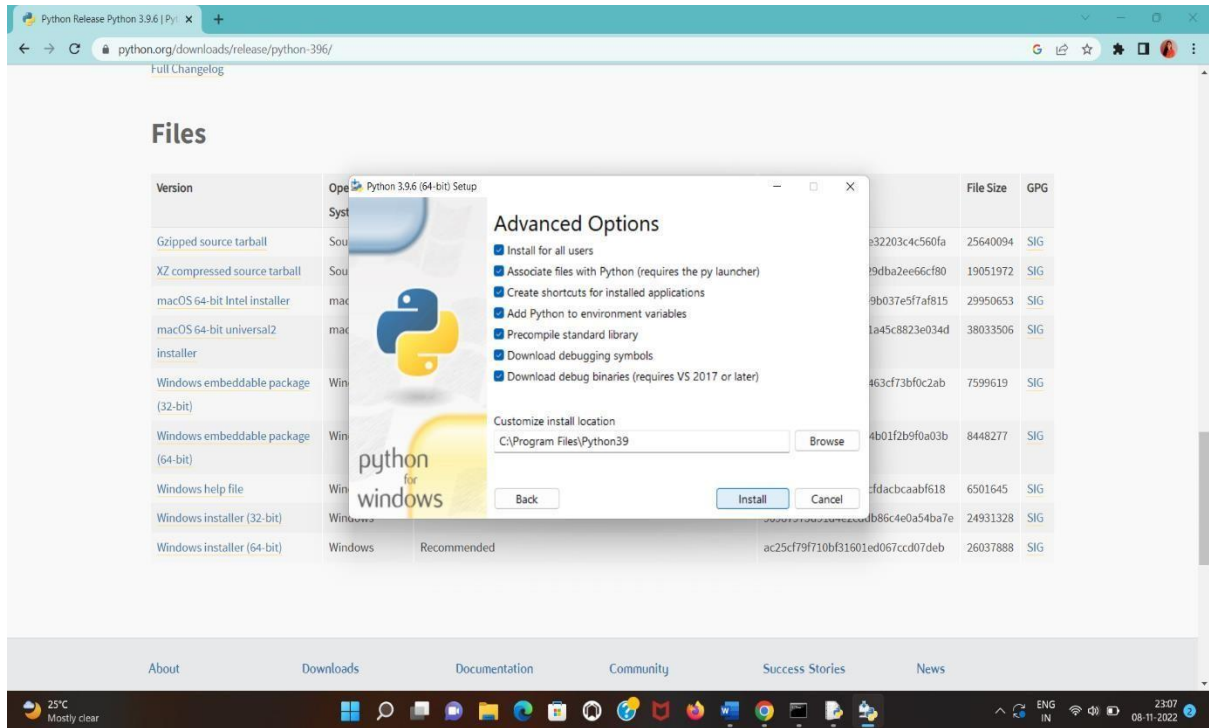
5. Install python 3.9.6 (64-bit) then click customize.



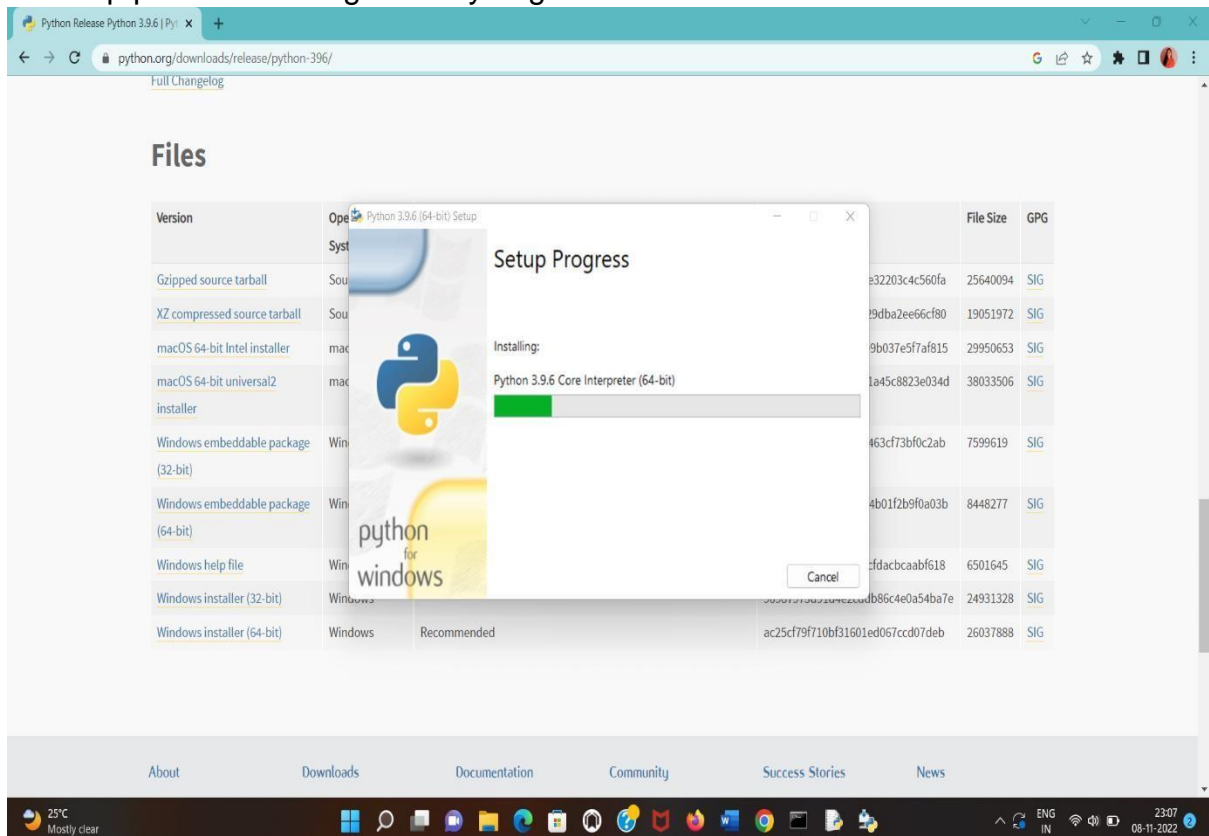
6. Click the next option.



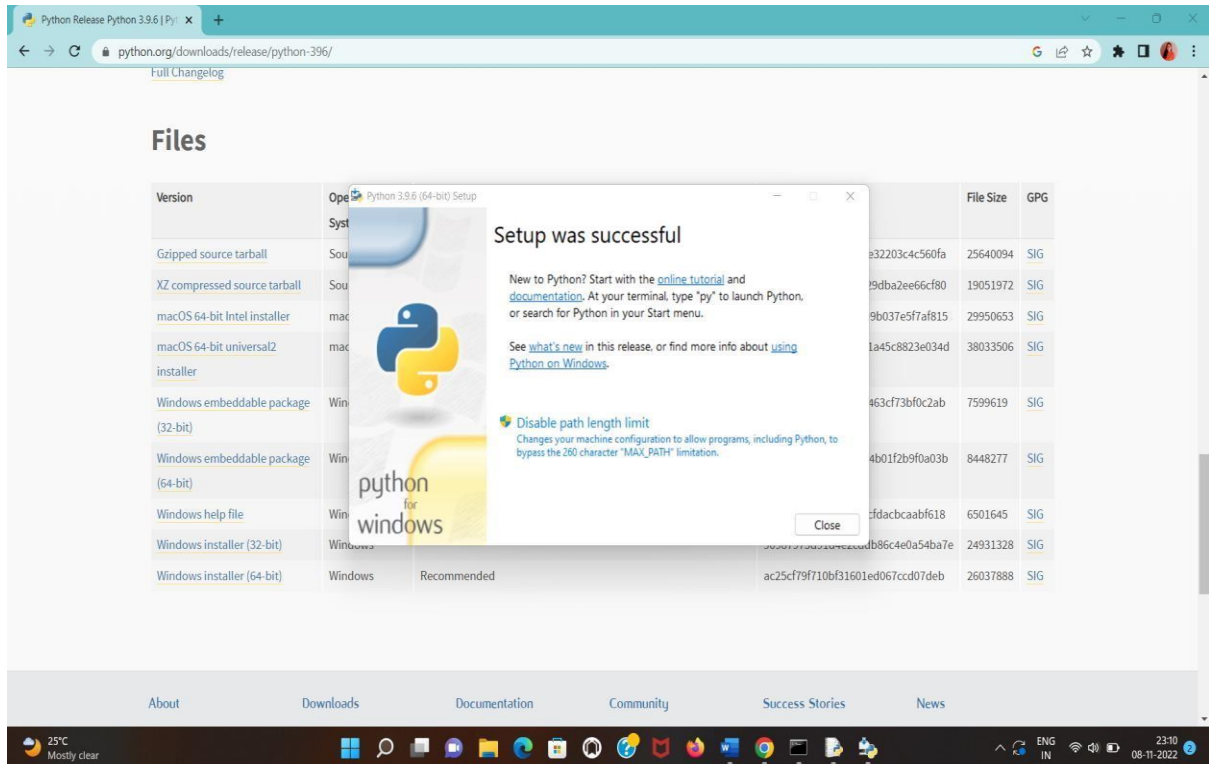
7. Select all the options and install the app.



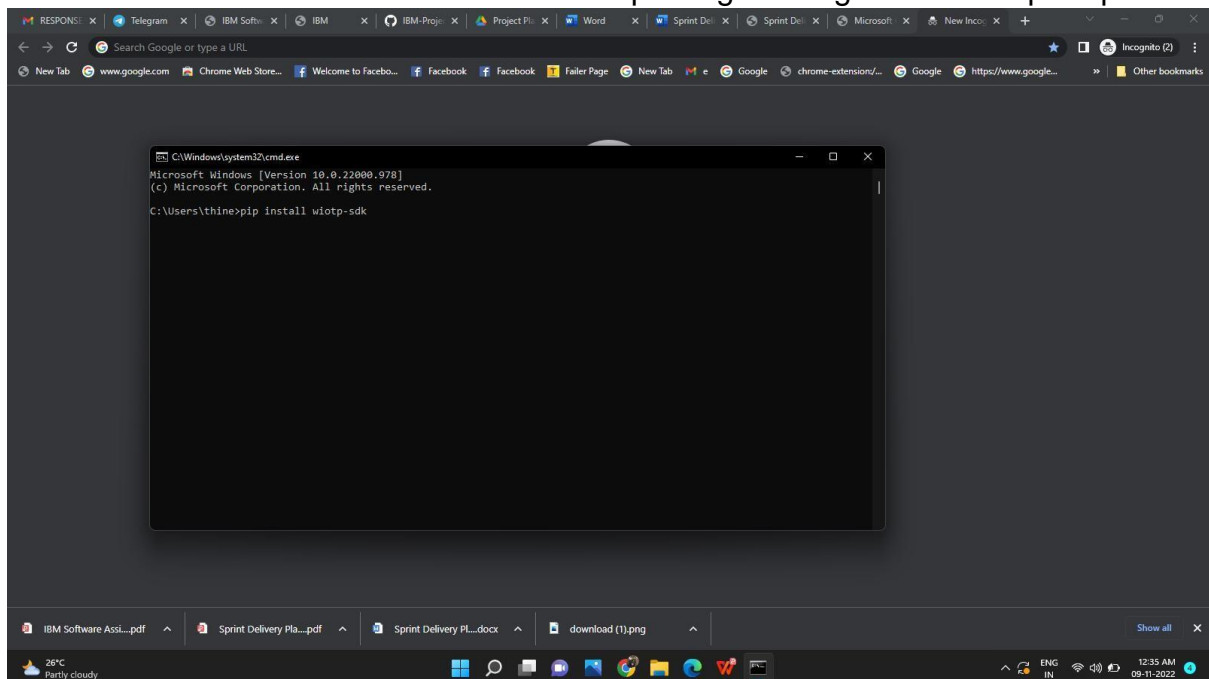
8. Set up process will begin after you give install.



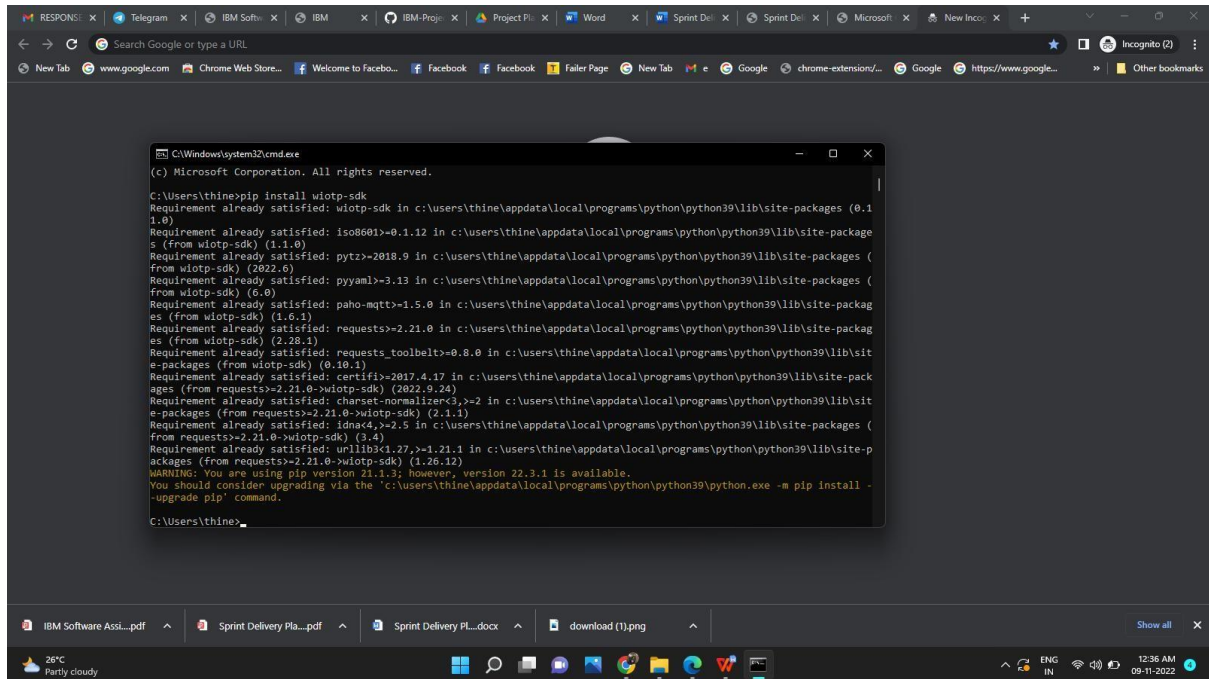
9. Python 3.9.6 version is installed successfully.



10. Now install the IBM Watson Platform package through command prompt.



11. The package will be installed.



12. Then type program and run in python.

Code.py - E:\PYTHON\Code.py (3.9.6)

File Edit Format Run Options Window Help

```
import random
print('Hazardous Gas Level=',str(random.randint(0,100)))
print('Temperature=',str(random.randint(0,100)))
print('Humidity=',str(random.randint(0,100)))
print('Pressure=',str(random.randint(0,100)))
```

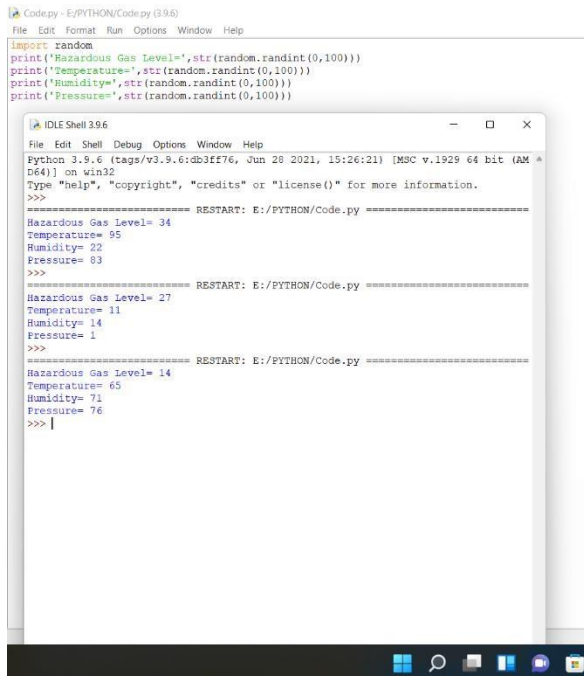
RESULT:

The python version 3.9.6 and IBM Watson IoT platform package are installed successfully.

Python Code:

```
import random
```

```
print('Hazardous Gas Level=',str(random.randint(0,100)))
print('Temperature=',str(random.randint(0,100)))
print('Humidity=',str(random.randint(0,100)))
print('Pressure=',str(random.randint(0,100)))
```

A screenshot of a Python IDE window titled 'Code.py - E:/PYTHON/Code.py (3.9.6)'. The code in the editor is:

```
import random
print('Hazardous Gas Level=',str(random.randint(0,100)))
print('Temperature=',str(random.randint(0,100)))
print('Humidity=',str(random.randint(0,100)))
print('Pressure=',str(random.randint(0,100)))
```

 Below the editor is a console window titled 'IDLE Shell 396'. It shows the output of the code after three restarts. The first restart shows:

```
Hazardous Gas Level= 34
Temperature= 95
Humidity= 22
Pressure= 83
```

 The second restart shows:

```
Hazardous Gas Level= 27
Temperature= 11
Humidity= 14
Pressure= 1
```

 The third restart shows:

```
Hazardous Gas Level= 14
Temperature= 65
Humidity= 71
Pressure= 76
```

A screenshot of a Python IDE window titled 'Code.py - E:/PYTHON/Code.py (3.9.6)'. The code in the editor is:

```
import random
print('Hazardous Gas Level=',str(random.randint(0,100)))
print('Temperature=',str(random.randint(0,100)))
print('Humidity=',str(random.randint(0,100)))
print('Pressure=',str(random.randint(0,100)))
```

Watson Code:

```
{
    "Hazardous Gas": random(0,100),
    "Temperature": random(0,100),
    "Humidity": random(0,100),
    "Pressure": random(0,100)
}
```

Node-RED: no x IBM-Project-51 x Python code.p x IBM-EPBL/IBM x Telegram Web x Service Details x IBM Watson IoT x IBM x Catalog - IBM x +

0tus0finternetofthings.ibmcloud.com/dashboard/devices/browse

IBM Watson IoT Platform

710019106014@smartinternz.com ID: 0tus0f

Browse Action Device Types Interfaces

01 Disconnected ESP32 Device Nov 6, 2022 9:53 AM

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
event_1	{"Hazardous Gas":28,"Temperature":19,"Humidit...	json	a few seconds ago
event_1	{"Hazardous Gas":94,"Temperature":28,"Humidit...	json	a few seconds ago
event_1	{"Hazardous Gas":68,"Temperature":65,"Humidit...	json	a few seconds ago
event_1	{"Hazardous Gas":85,"Temperature":77,"Humidit...	json	a few seconds ago
event_1	{"Hazardous Gas":66,"Temperature":58,"Humidit...	json	a few seconds ago

Items per page 50 | 1-2 of 2 items

ESP32 01

Events 1

Event type name event_1 Frequency 20 x Every Minute Send

Payload

You can override field values in the event payload that is sent by this device. Specify the override values in the editor window.

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

What functions can I apply?

Cancel Save

1 of 1 page

22°C Partly cloudy

06:28 PM 06-11-2022

Node-RED: no x IBM-Project-51 x Python code.p x IBM-EPBL/IBM x Telegram Web x Service Details x IBM Watson IoT x IBM x Catalog - IBM x +

0tus0finternetofthings.ibmcloud.com/dashboard/devices/browse

IBM Watson IoT Platform

710019106014@smartinternz.com ID: 0tus0f

Browse Action Device Types Interfaces

01 Disconnected ESP32 Device Nov 6, 2022 9:53 AM 710019106014@smartinternz.com

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
event_1	{"Hazardous Gas":85,"Temperature":77,"Humidit...	json	a few seconds ago
event_1	{"Hazardous Gas":66,"Temperature":58,"Humidit...	json	a few seconds ago
event_1	{"Hazardous Gas":43,"Temperature":19,"Humidit...	json	a few seconds ago
event_1	{"Hazardous Gas":26,"Temperature":13,"Humidit...	json	a few seconds ago
event_1	{"Hazardous Gas":26,"Temperature":37,"Humidit...	json	a few seconds ago

Items per page 50 | 1-2 of 2 items

014 Disconnected ESP32 Device Nov 6, 2022 12:43 AM 710019106014@smartinternz.com

1 Simulation running

22°C Partly cloudy

06:28 PM 06-11-2022