

PYTHON SCRIPT

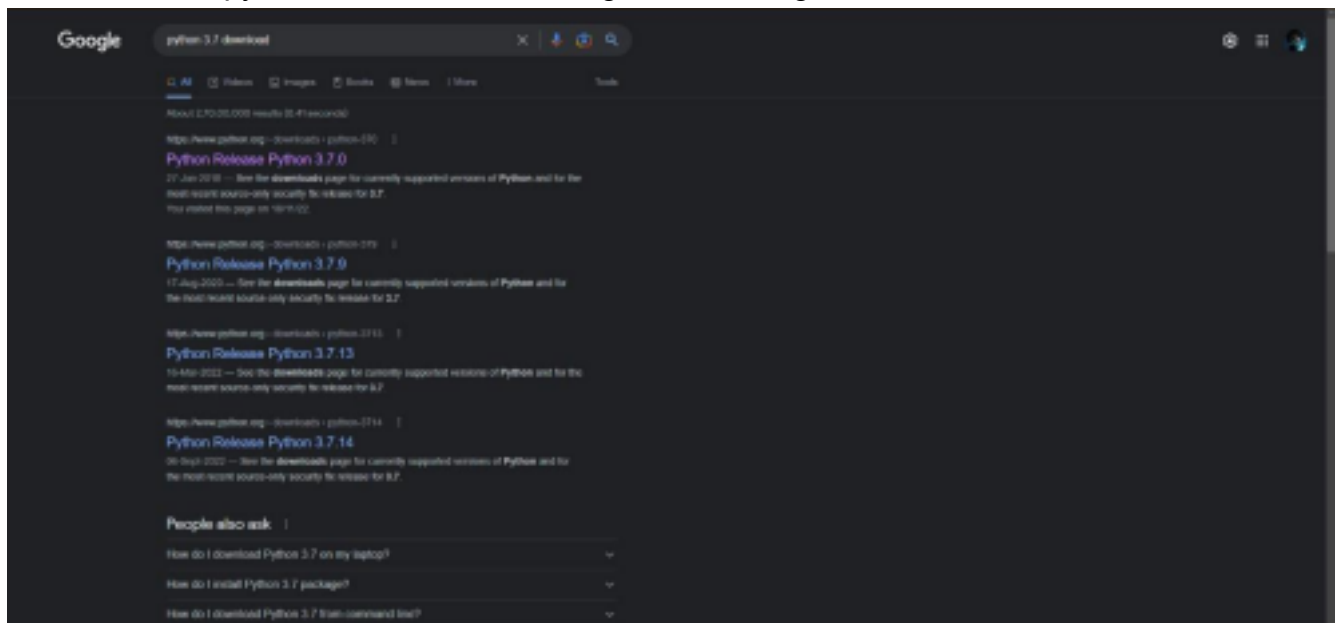
Assignment Date	24th NOVEMBER 2022
Team ID	PNT2022TMID29330
Project Name	Gas Leakage Monitoring and Alerting System

AIM:

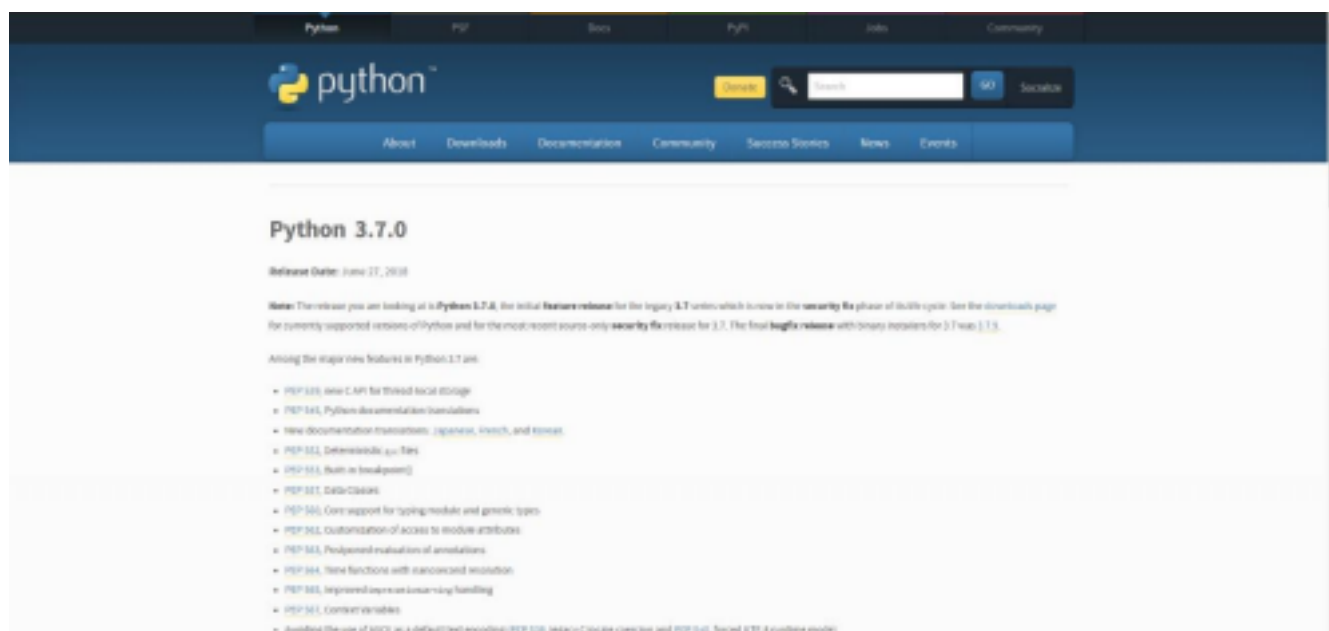
To install python version 3.9.6 and IBM Watson IoT platform packages in python.

STEPS:

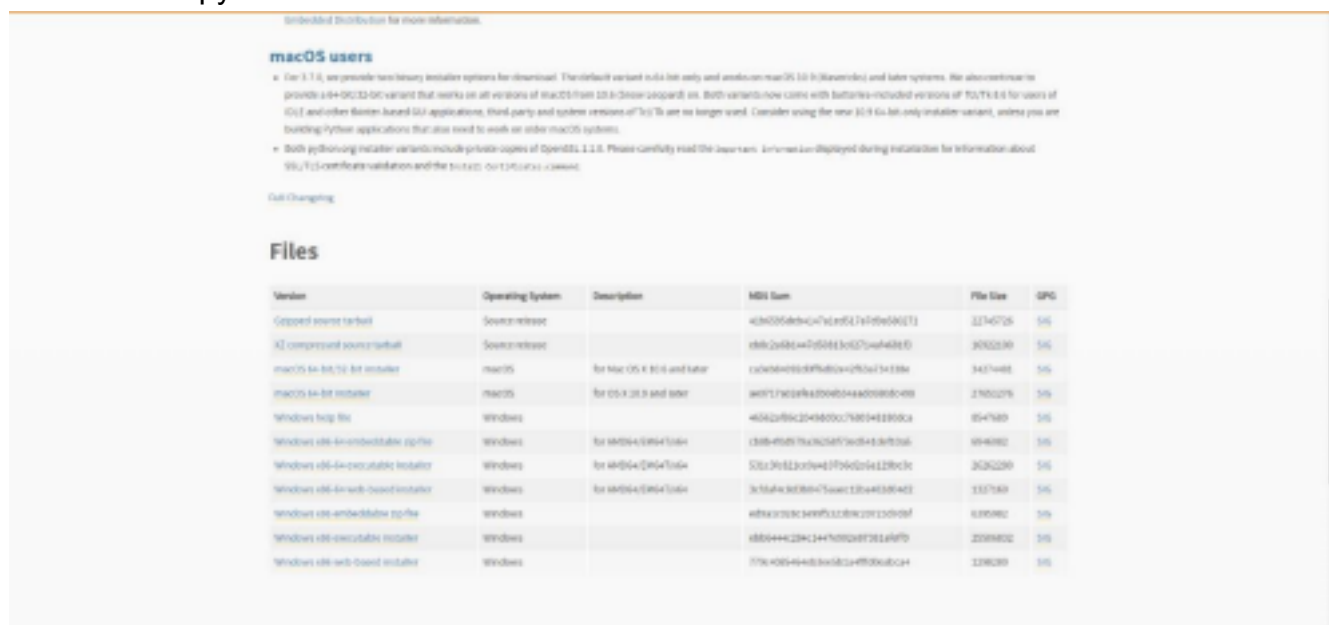
1. Search for python for windows in Google search engine.



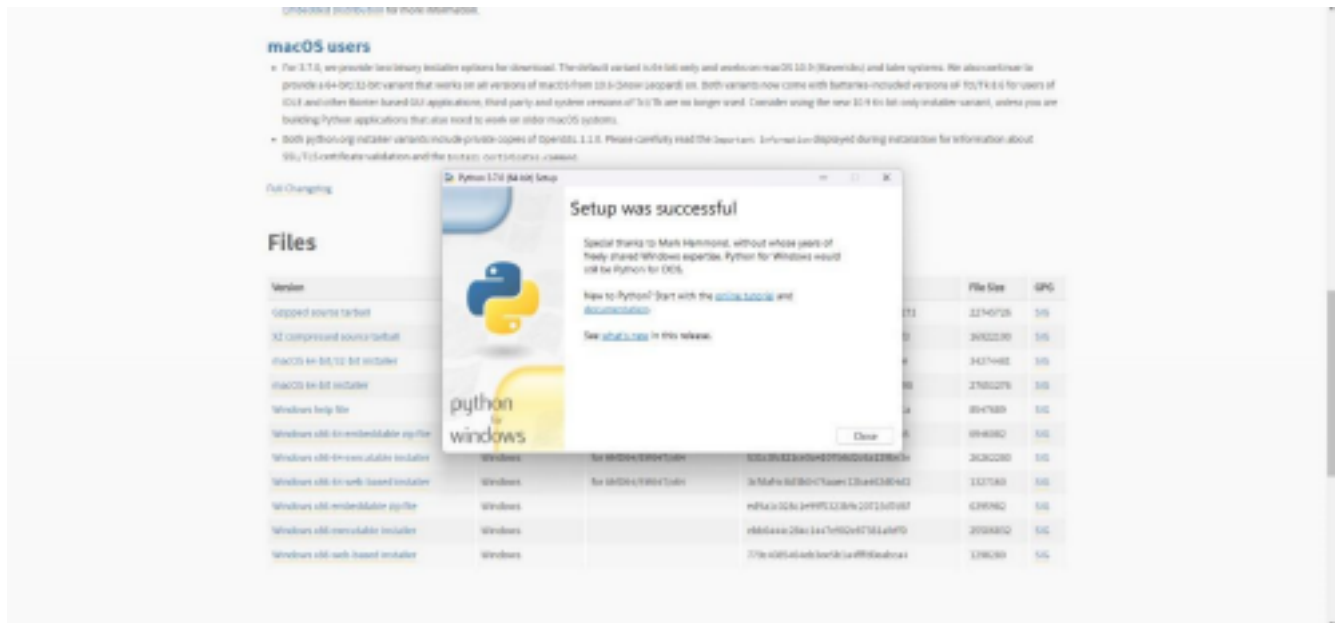
2. Click the First link..



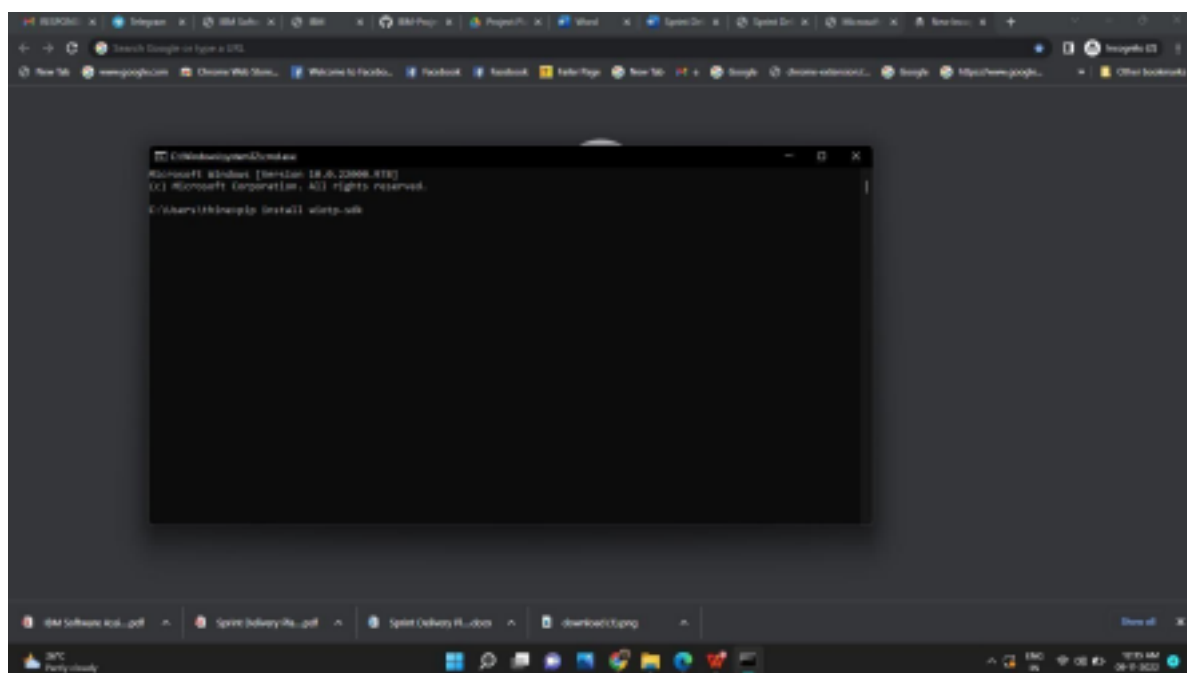
3. Click the python version 3.9.6 and download.



4. Python 3.9.6 version is installed successfully.



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



6. The package will be installed.


```

#Provide your IBM Watson Device Credentials
organization = "qijw2u"
deviceType = "NODEMCU"
deviceId = "glmas1_01"
authMethod = "token"
authToken = "123456789"

# Initialize GPIO
def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    status=cmd.data['command']
    if status=="lighton":
        print ("led is on")
    elif status == "lightoff":
        print ("led is off")
    else :
        print ("please send proper command")

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

    temp=random.randint(90,110)
    Humid=random.randint(60,100)

    data = { 'temp' : temp, 'Humid': Humid }
    #print data
    def myOnPublishCallback():
        print ("Published Temperature = %s C" % temp, "Humidity = %s %" % Humid, "to
IBM Watson")

    success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0,
on_publish=myOnPublishCallback)
    if not success:
        print("Not connected to IoT")
        time.sleep(10)
        deviceCli.commandCallback = myCommandCallback

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

```

