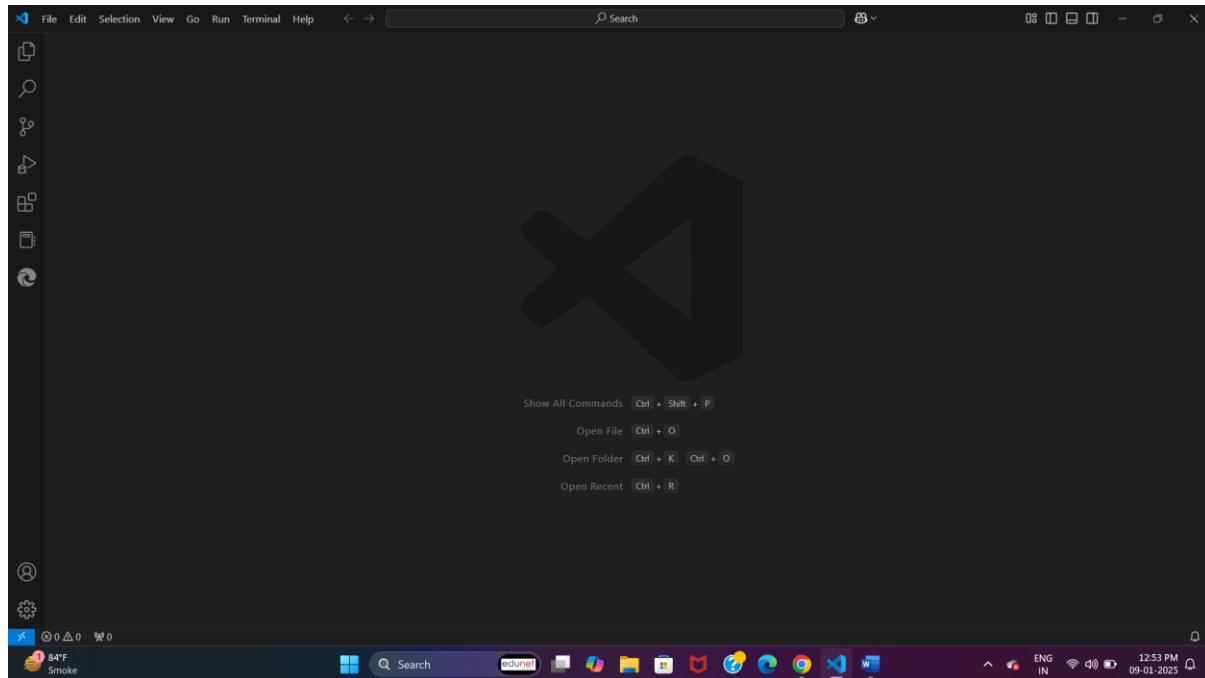


Web UI For IBM Cloud DB2 database

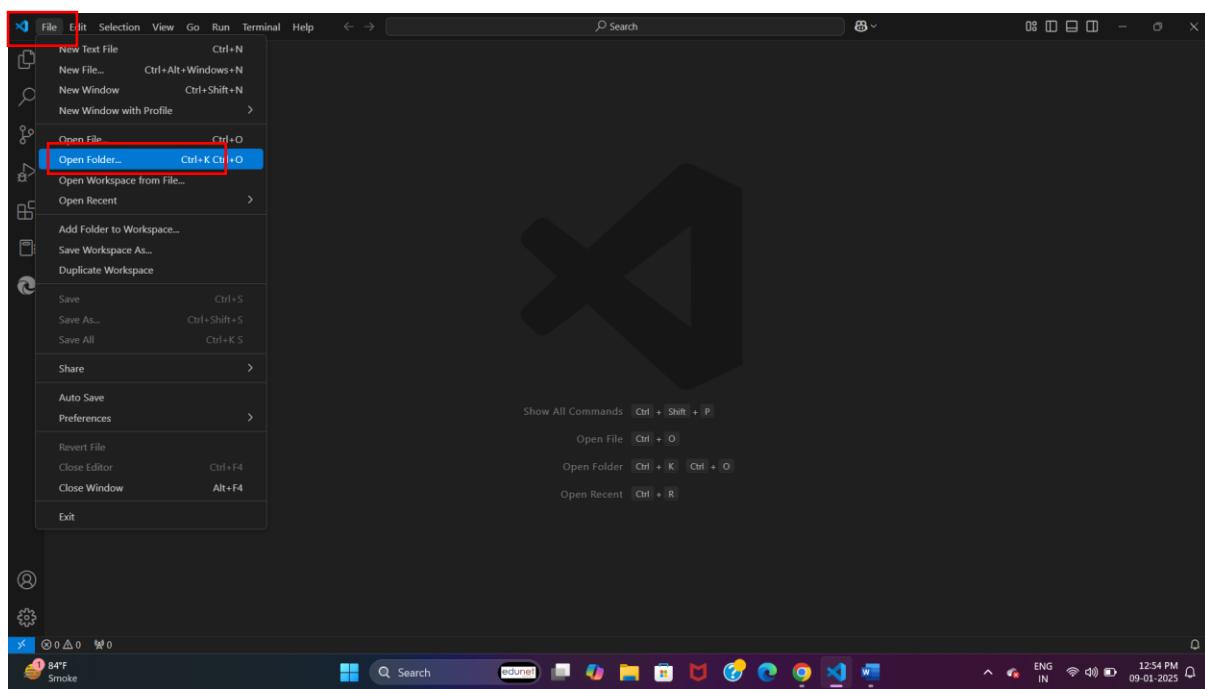
For how to create and use DB2 service please refer DB2 documentation

Once you create database on cloud then follow this steps

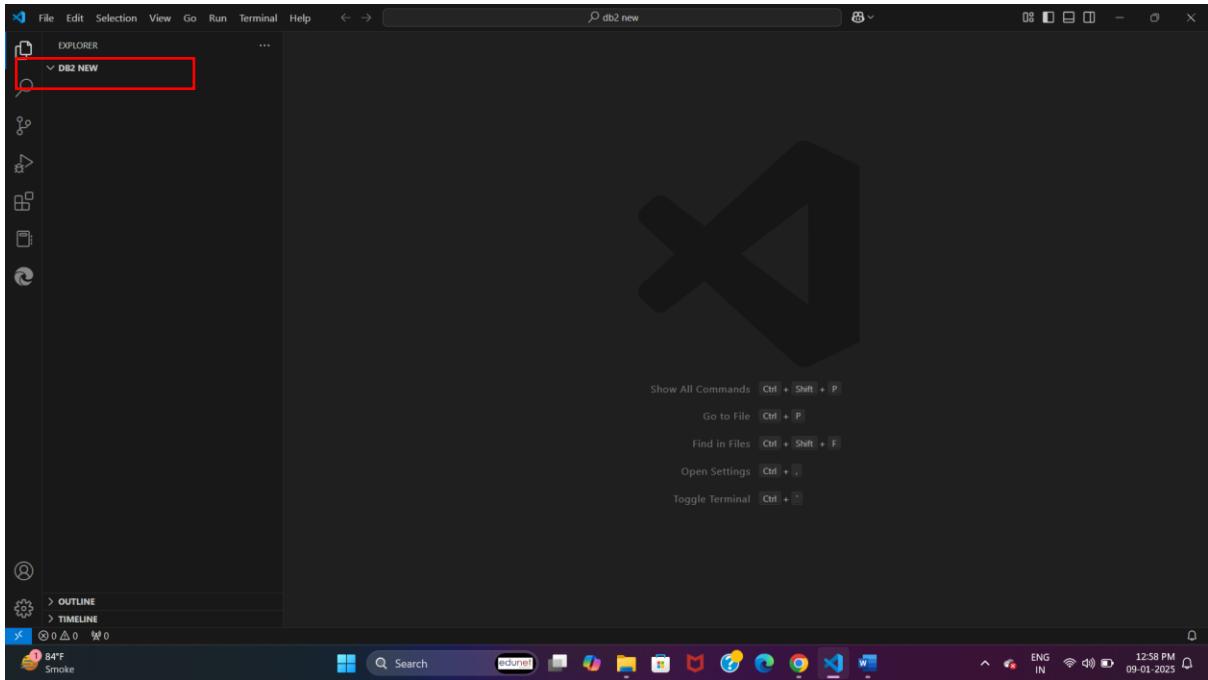
Step 1 : Create new folder at any location in your Laptop/Computer then Open Visual Studio Code



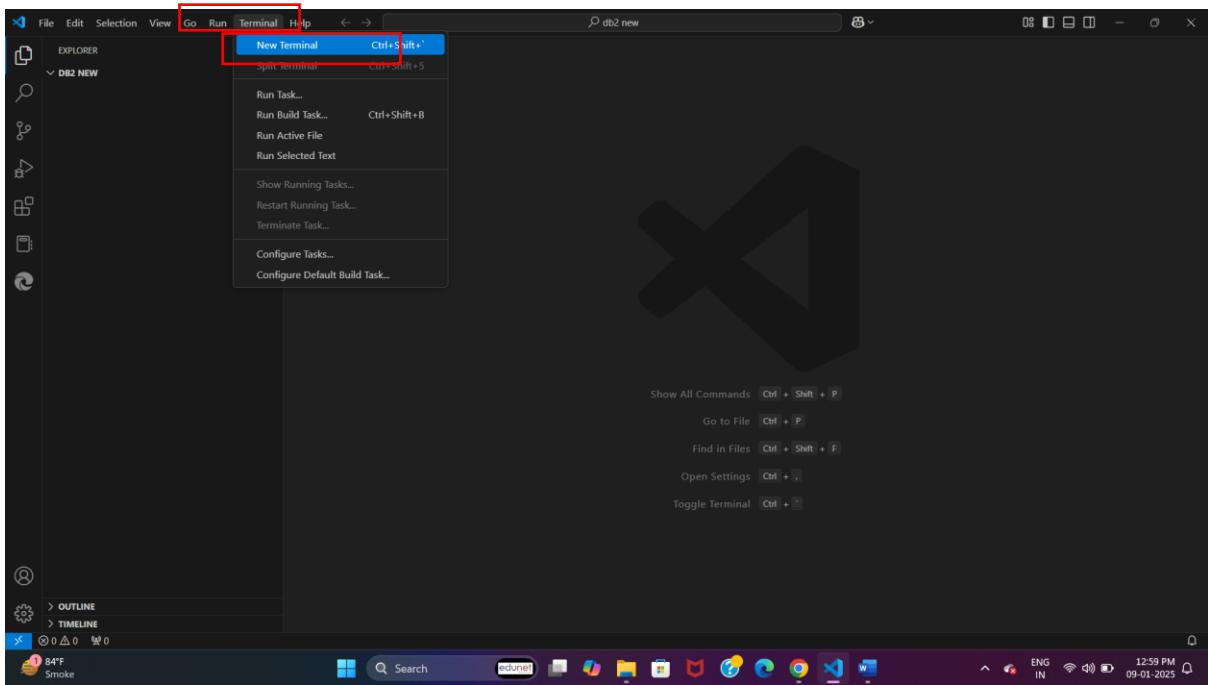
Step 2 : Then click on file -> open folder -> select your newly created folder



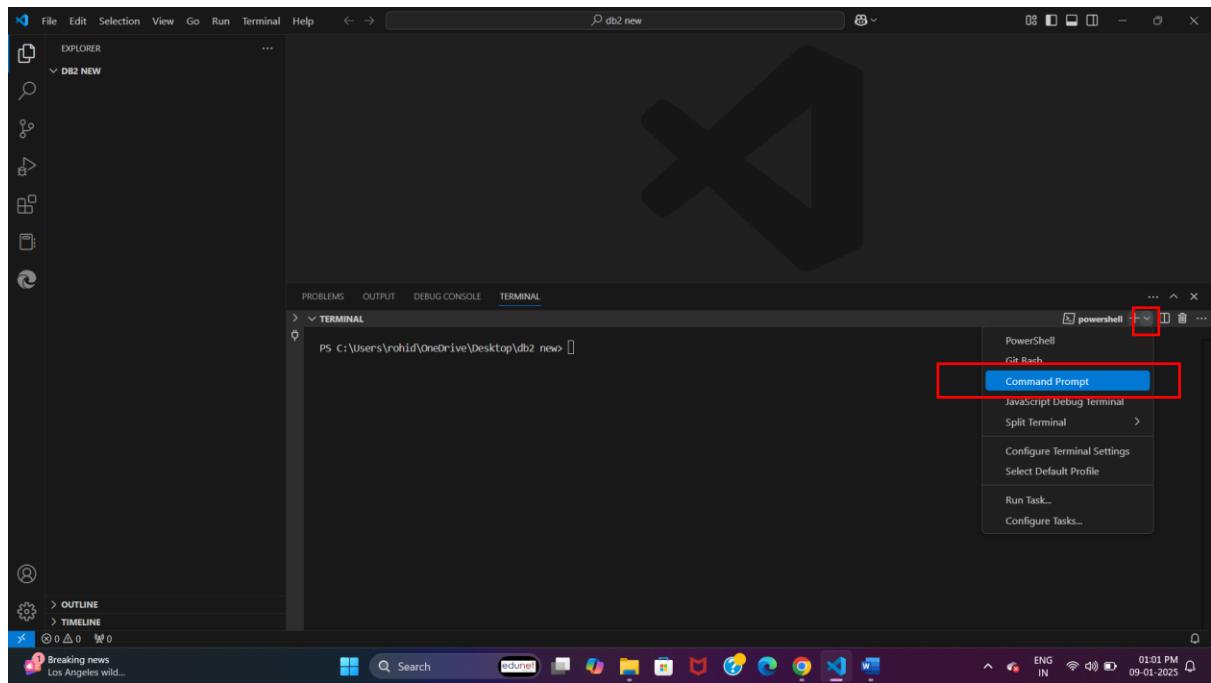
Step 3 :- once you open newly created folder in VS code you will UI like this



Step 4 : Click on Terminal -> New Terminal

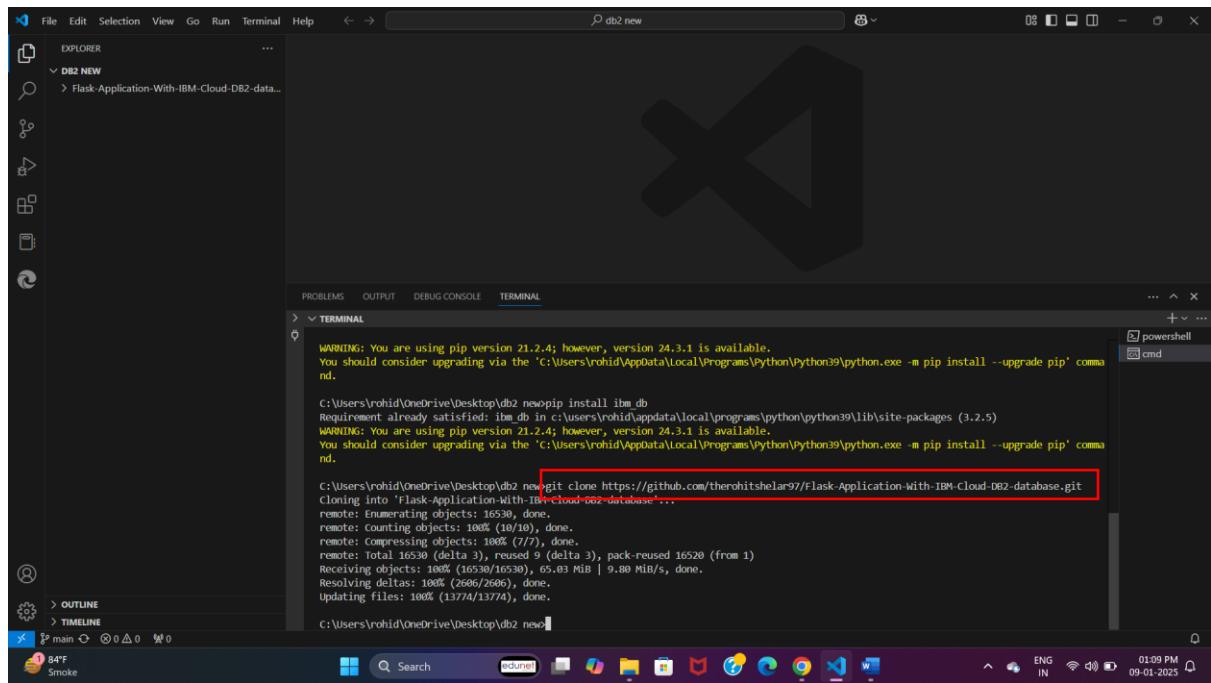


Step 5 : In VS code terminal click on down arrow -> Command Prompt

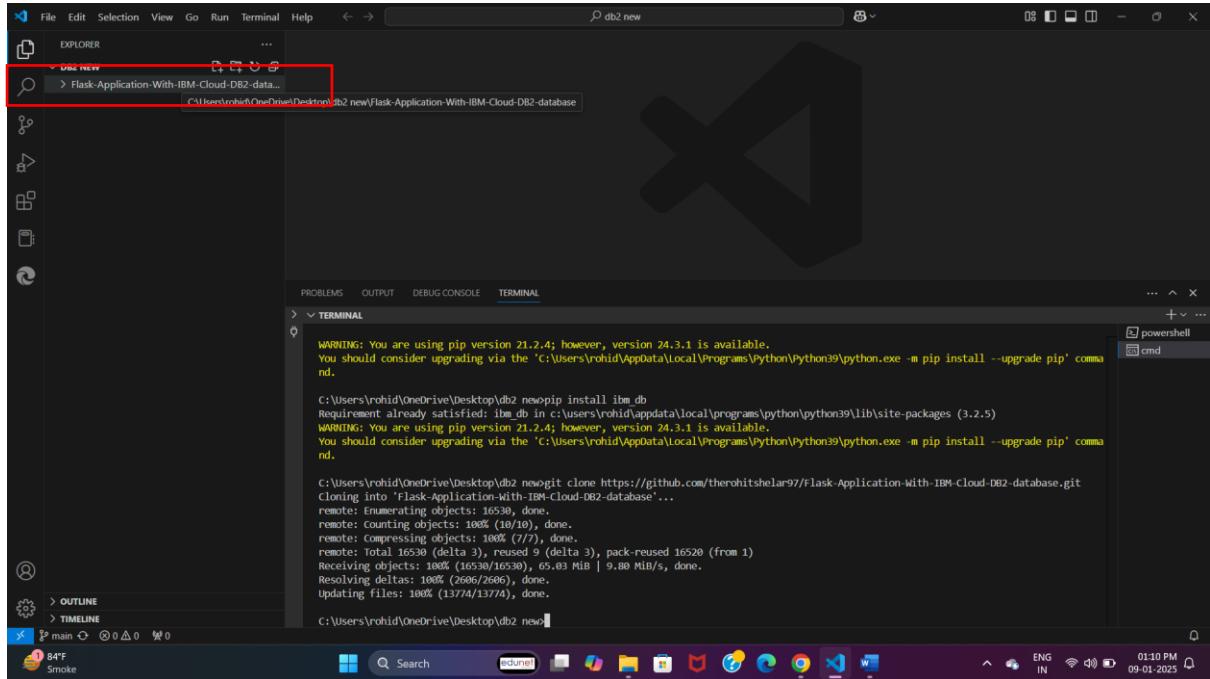


Step 6 : clone the git repository in terminal

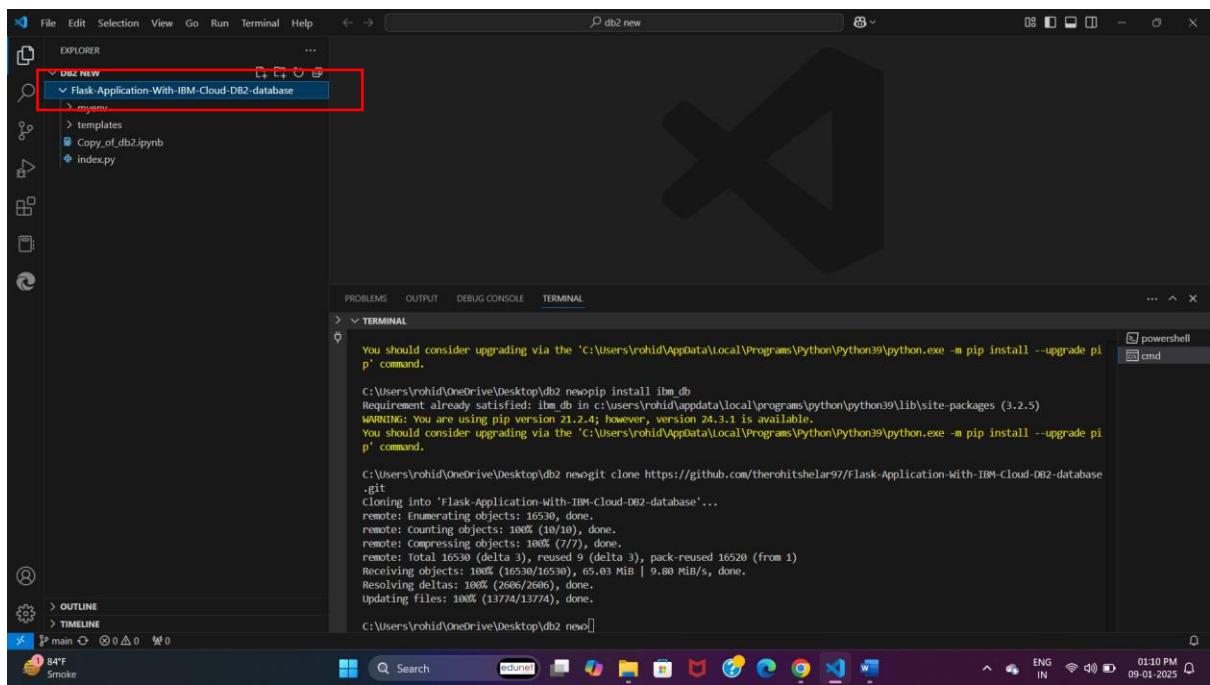
[git clone https://github.com/therohitshelar97/Flask-Application-With-IBM-Cloud-DB2-database.git](https://github.com/therohitshelar97/Flask-Application-With-IBM-Cloud-DB2-database.git)



Step 7 : You will see one folder in left hand side bar (Flask-Application-With-IBM-DB2-database)

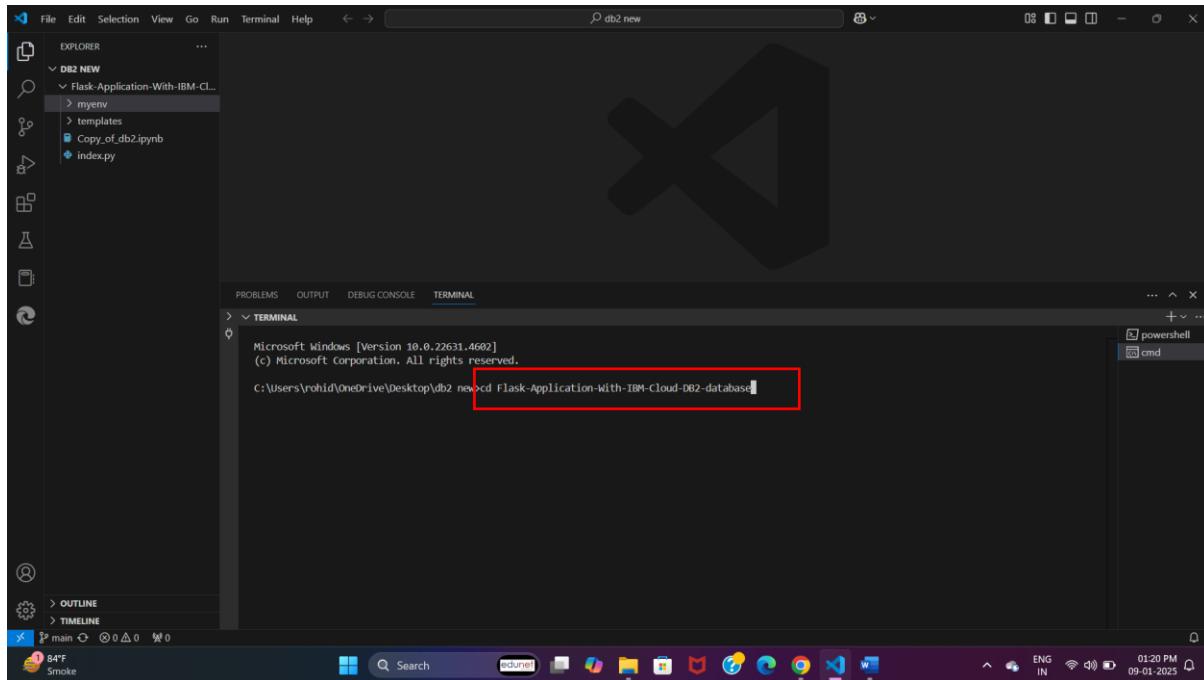


Step 8 : click on that new folder (Flask-Application-With-IBM-DB2-database)



Step 9 : In terminal type

a. cd Flask-Application-With-IBM-Cloud-DB2-database



Microsoft Windows [Version 10.0.22631.4602]
(c) Microsoft Corporation. All rights reserved.
C:\Users\rohid\OneDrive\Desktop\db2 new>cd Flask-Application-With-IBM-Cloud-DB2-database

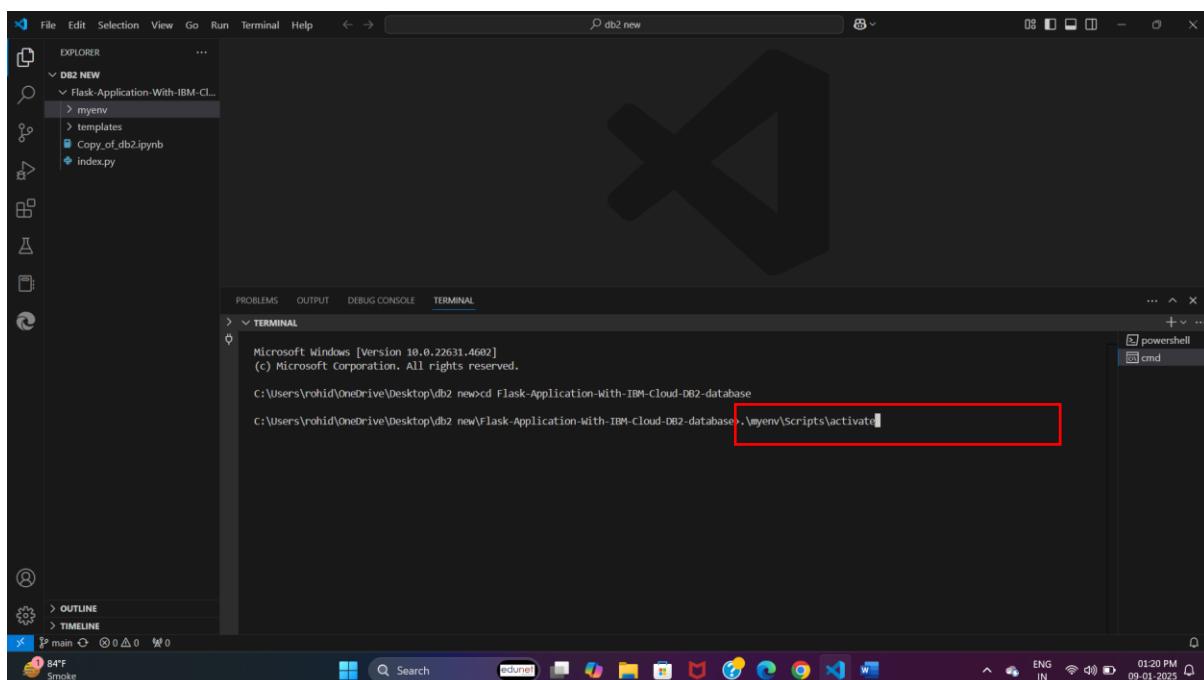
Step 10 : then in terminal type

a. .\myenv\Scripts\activate

Before execution virtual env

* python -m venv myenv

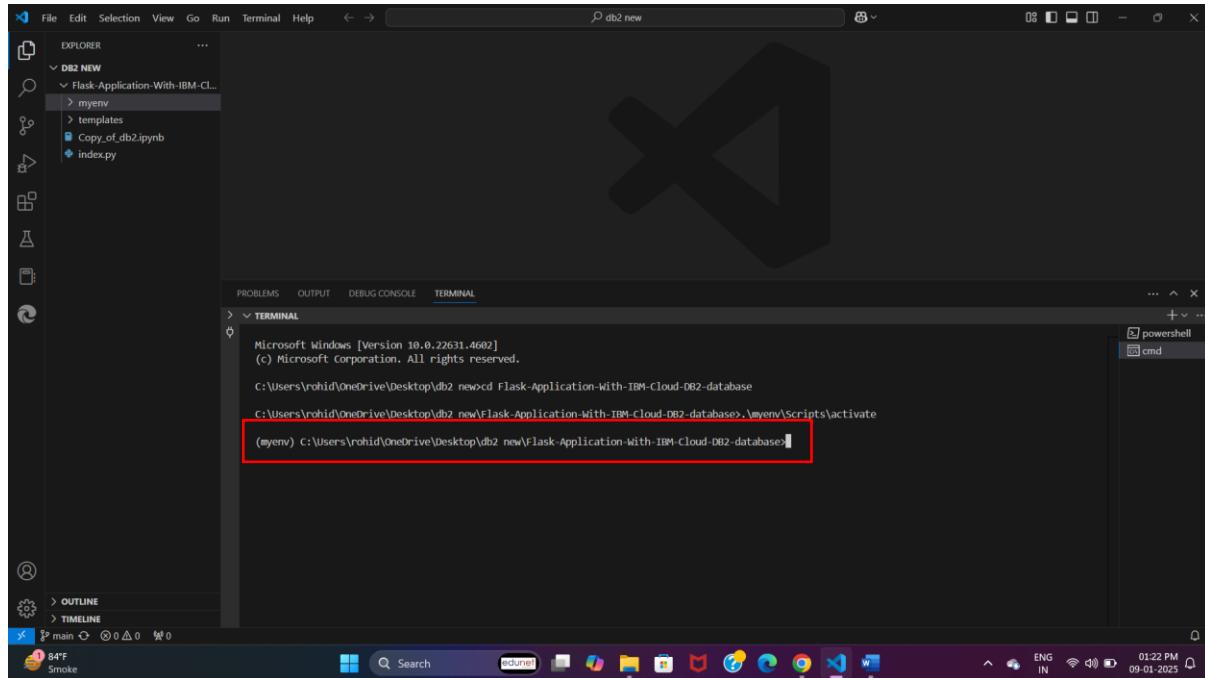
Activate virtual environment which contain all libraries related to the project



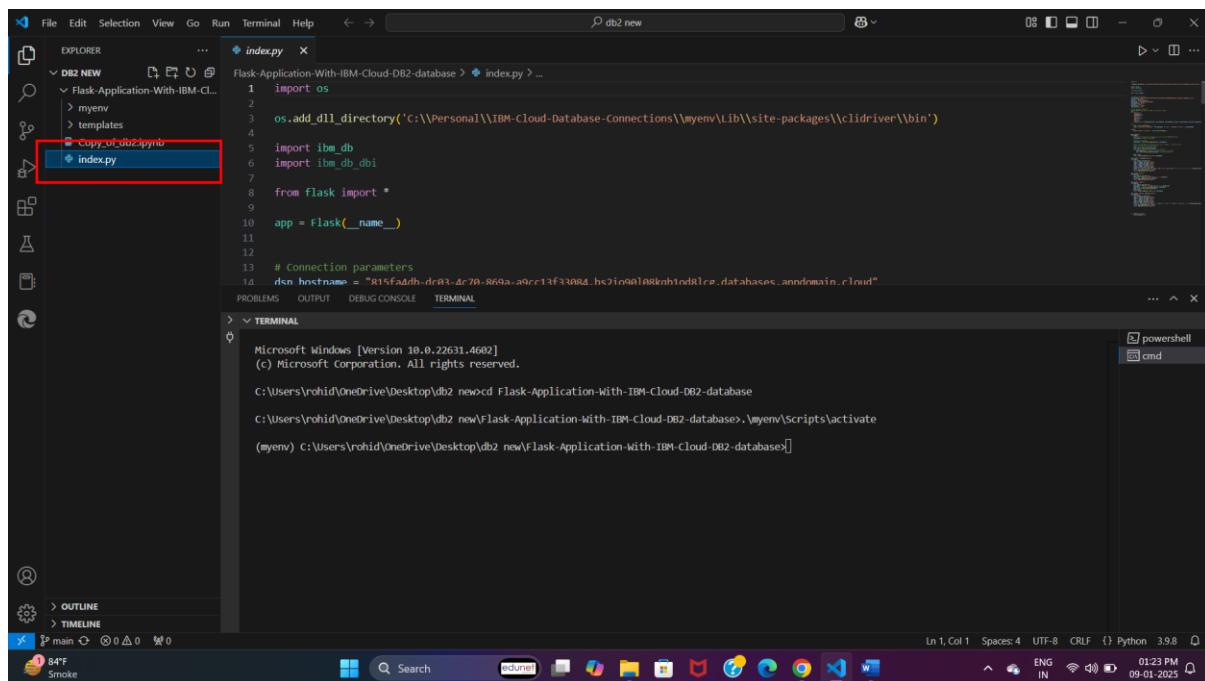
Microsoft Windows [Version 10.0.22631.4602]
(c) Microsoft Corporation. All rights reserved.
C:\Users\rohid\OneDrive\Desktop\db2 new>cd Flask-Application-With-IBM-Cloud-DB2-database
C:\Users\rohid\OneDrive\Desktop\db2 new>Flask-Application-With-IBM-Cloud-DB2-database>.\myenv\Scripts\activate

Step 11 : Once Virtual Environment activate then you will see path like

(myenv) C:\Users\rohid\OneDrive\Desktop\db2 new\Flask-Application-With-IBM-Cloud-DB2-database>



Step 12 : Click on index.py



Step 13 : In main code editor you can see some python codes for this, You have to change the path of ibm_db package

The screenshot shows a Microsoft Visual Studio Code (VS Code) interface. The left sidebar displays the 'EXPLORER' view with a tree structure for a project named 'DB2 NEW'. The 'index.py' file is open in the center editor area. The code imports os, add_dll_directory, ibm_db, ibm_db_dbi, flask, and flask_sqlalchemy, and defines a Flask application with connection parameters for an IBM Cloud DB2 database. The 'TERMINAL' tab at the bottom shows command-line output indicating a successful connection to the database.

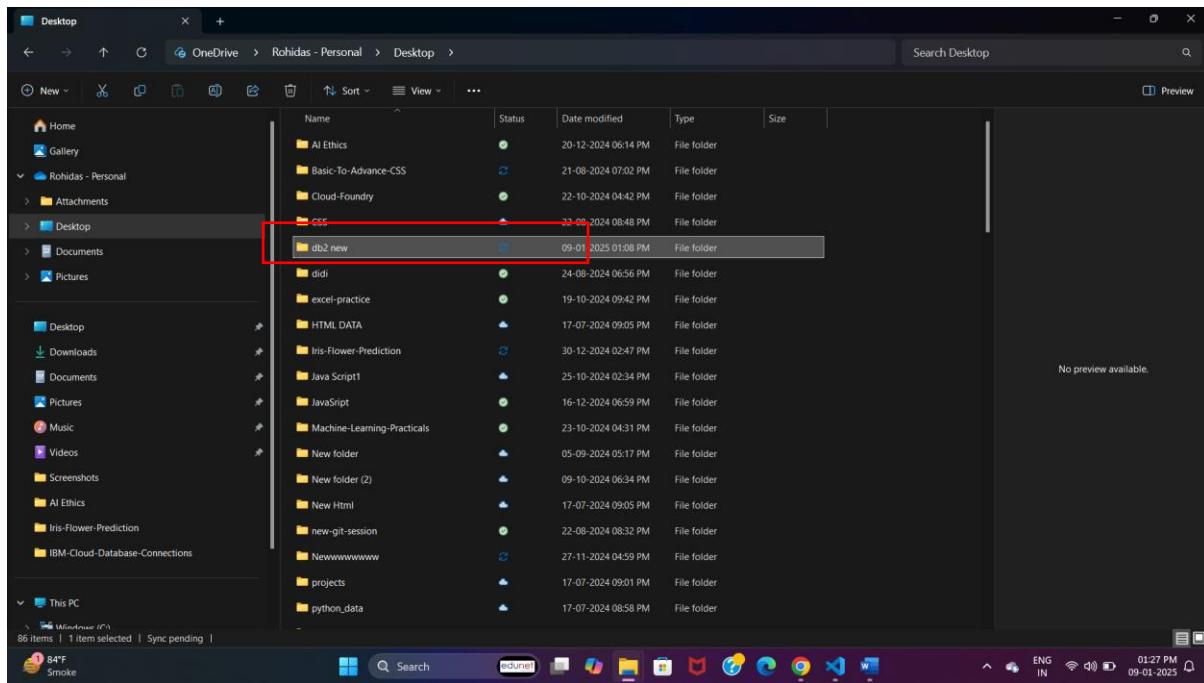
```
File Edit Selection View Go Run Terminal Help < > db2 new
EXPLORER
DB2 NEW
  Flask-Application-With-IBM-Cloud-DB2-database > index.py > ...
  myenv
  templates
  Copy_of_db2.ipynb
  index.py

1 import os
2
3 os.add_dll_directory('C:\\Personal\\IBM-Cloud-Database-Connections\\myenv\\Lib\\site-packages\\clidriver\\bin')
4
5 import ibm_db
6 import ibm_db_dbi
7
8 from flask import *
9
10 app = Flask(__name__)
11
12
13 # Connection parameters
14 dsn_hostname = "815faa7db.dba3-4c70-869a-a9cc13f33084.hs2in9al08khh1d8lcp.databases.uscloud.net"
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
> < TERMINAL
powershell
cmd
Microsoft Windows [Version 10.0.22631.4602]
(c) Microsoft Corporation. All rights reserved.

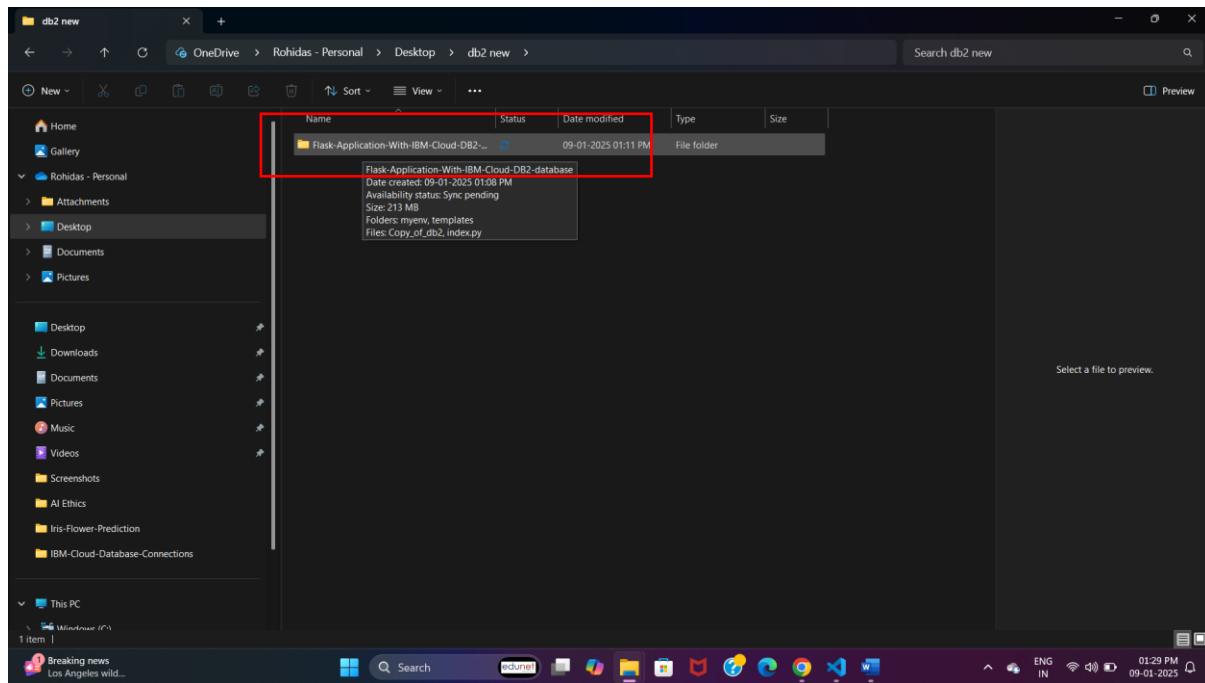
C:\Users\rohid\OneDrive\Desktop\db2_new\Flask-Application-With-IBM-Cloud-DB2-database>
C:\Users\rohid\OneDrive\Desktop\db2_new\Flask-Application-With-IBM-Cloud-DB2-database>.\myenv\Scripts\activate
(myenv) C:\Users\rohid\OneDrive\Desktop\db2_new\Flask-Application-With-IBM-Cloud-DB2-database>
```

Step 14 : Please go in newly created folder where you have this project, Then click on this folder

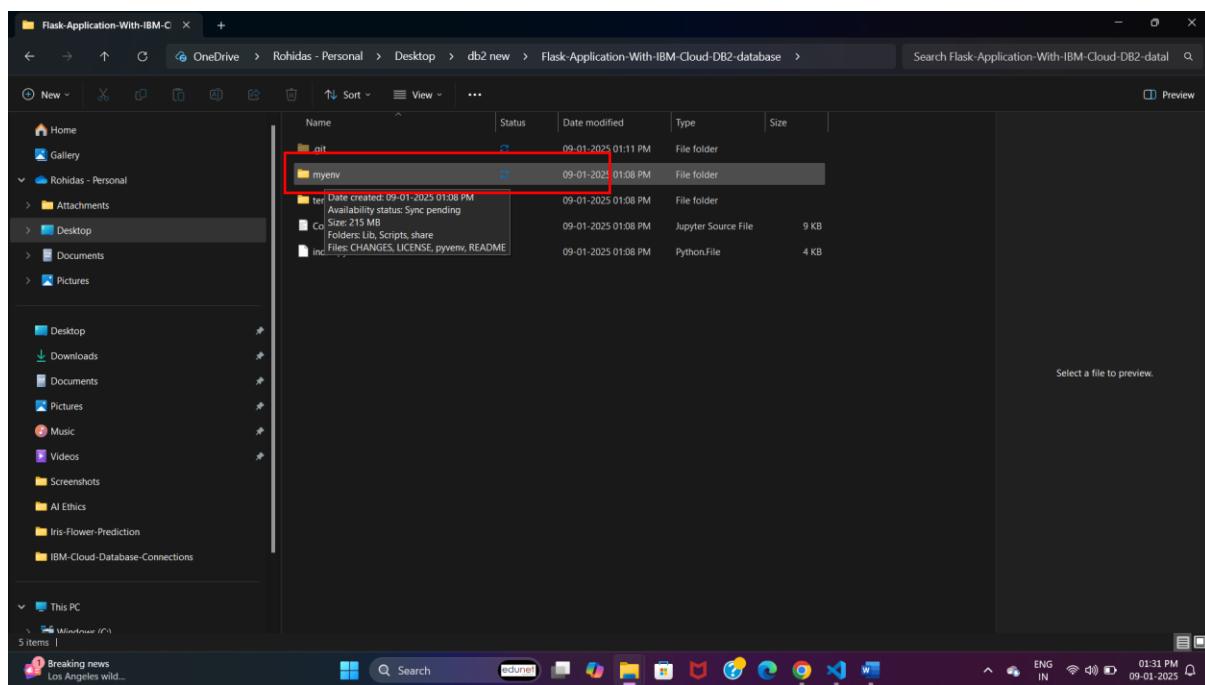
Note : my folder name is (db2 new) your folder name might be different



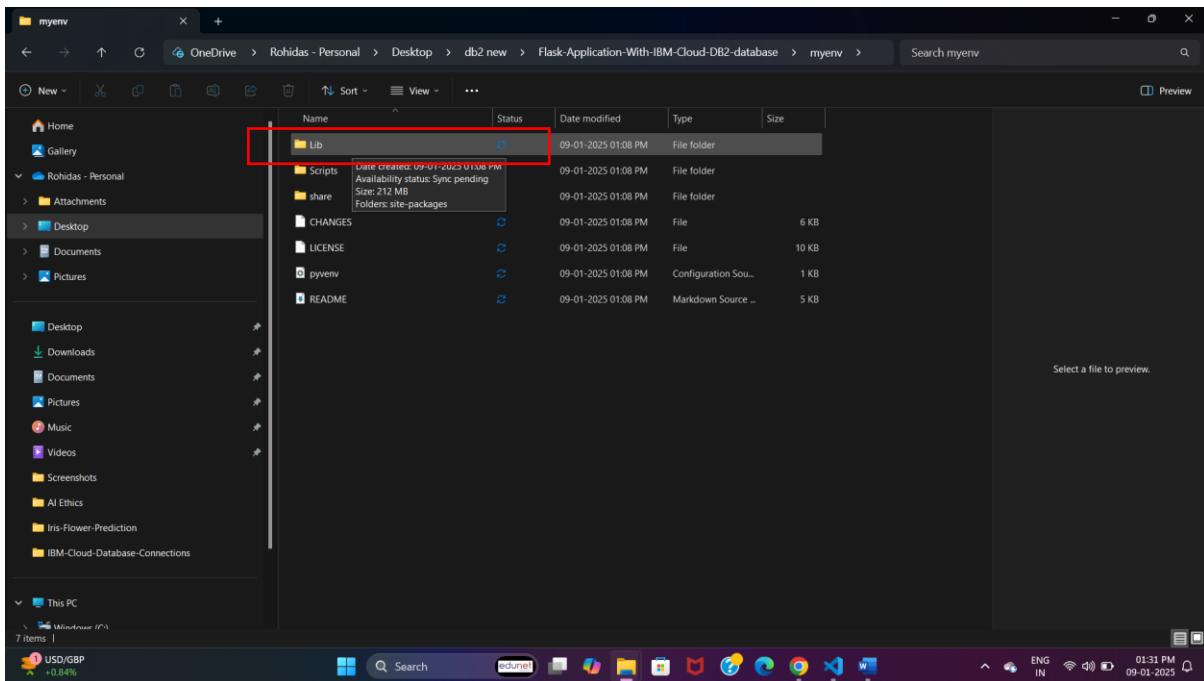
Step 15 : Click on (Flask-Application-With-IBM-Cloud-DB2-database)



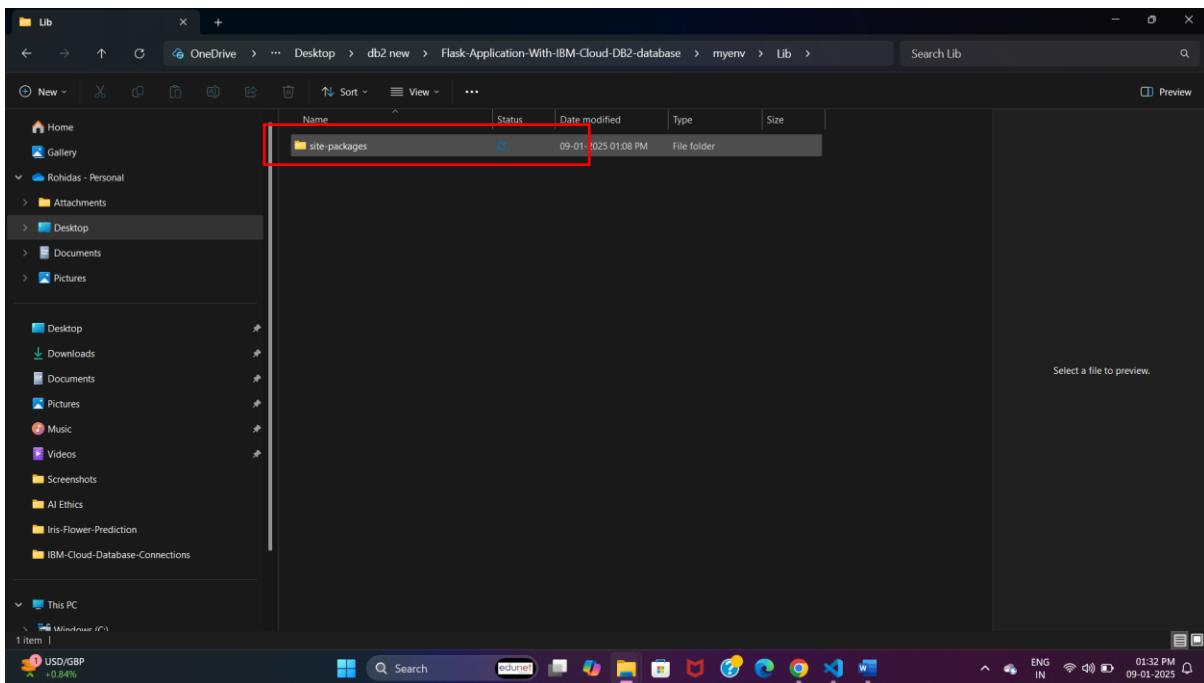
Step 16 : Click on (myenv)



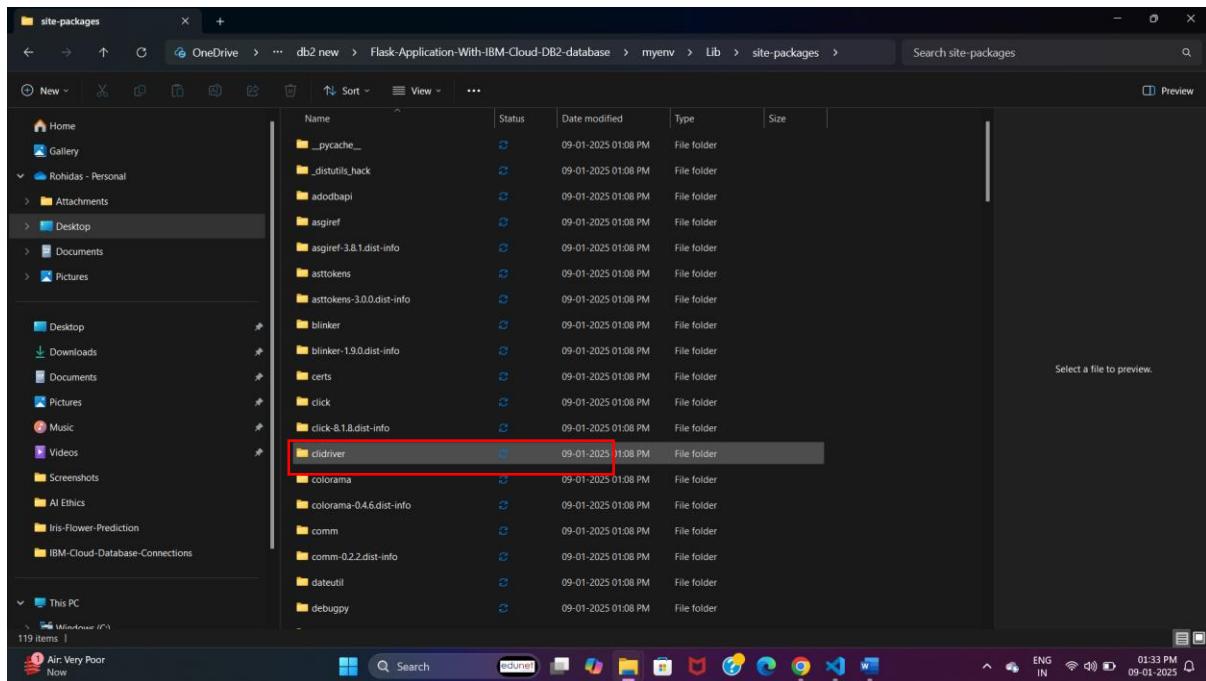
Step 17 : Click on (Lib)



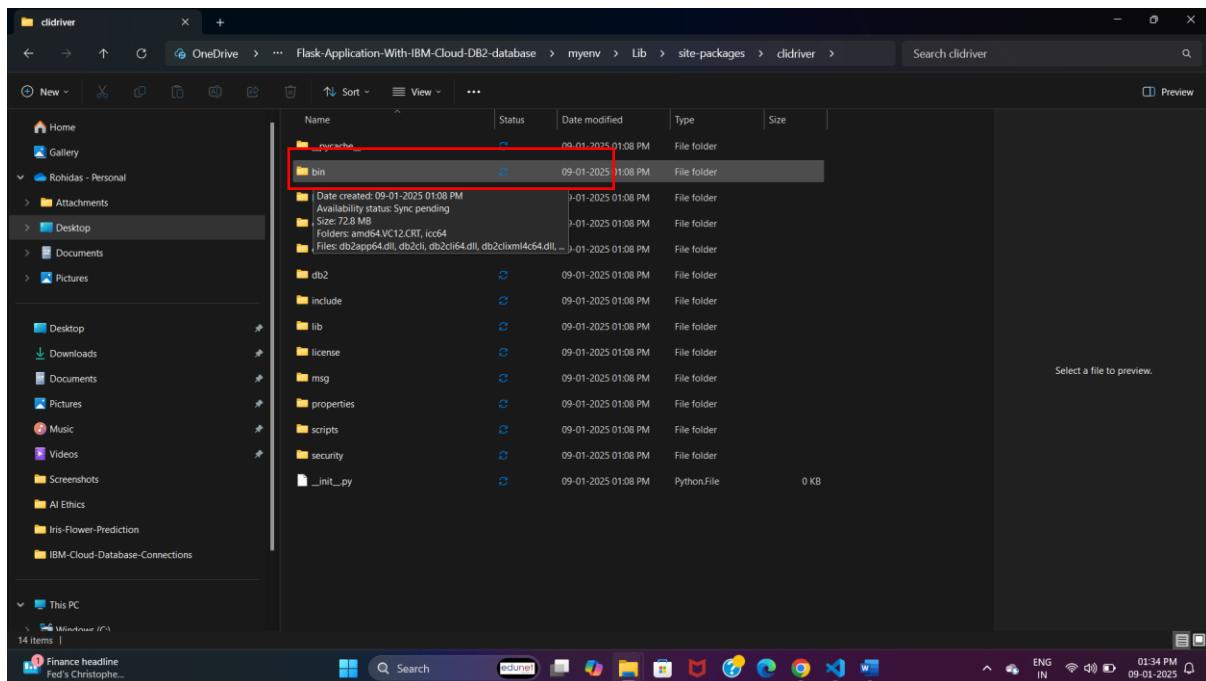
Step 18 : Click On (site-packages)



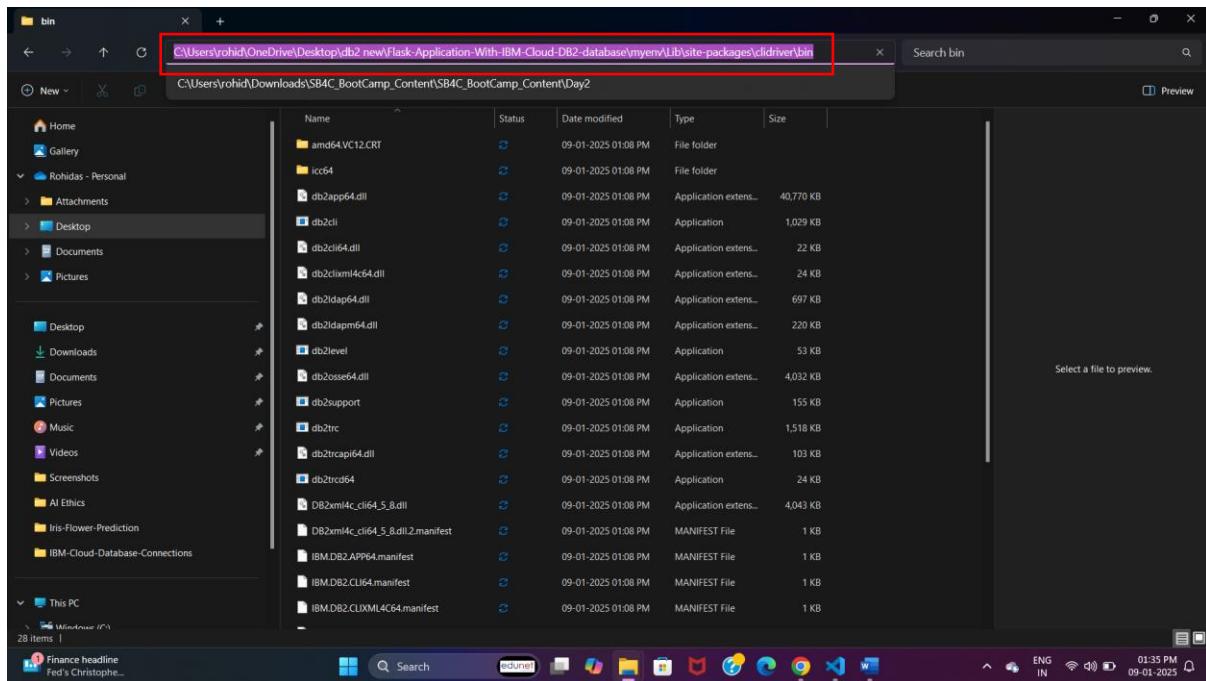
Step 19 : Then click on (clidriver)



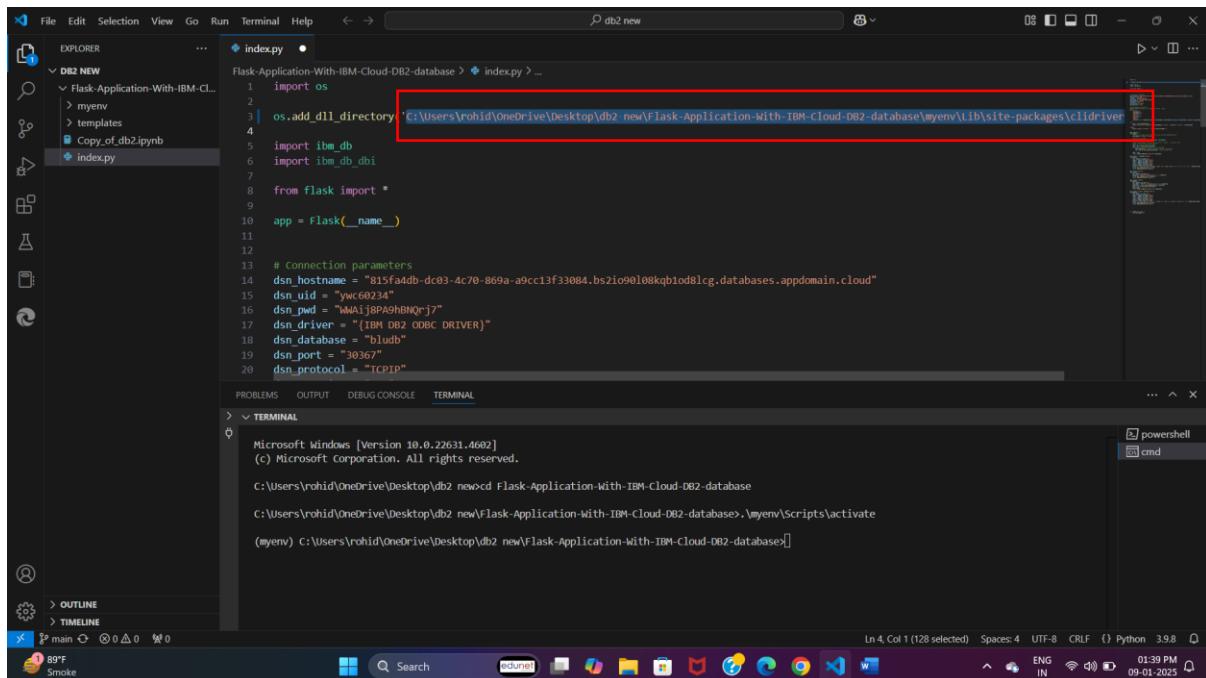
Step 20 : Click on (bin)



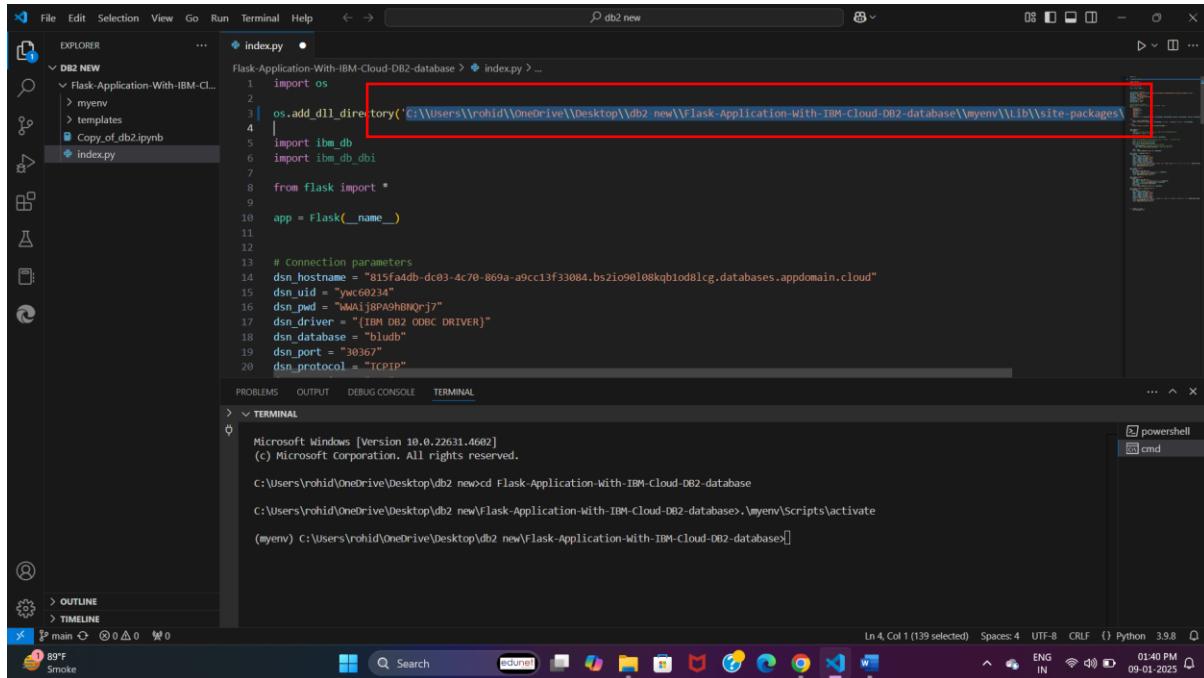
Step 21 : copy the path



Step 22 : Now go back in visual Studio code and paste that copied path

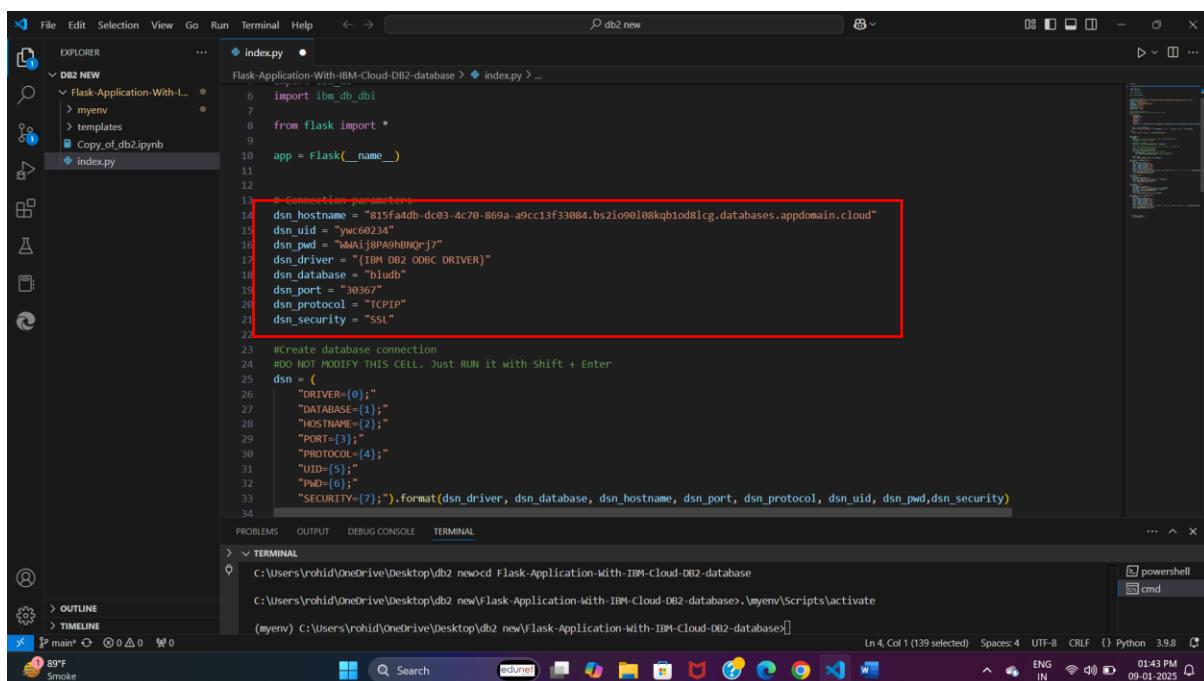


Step 22 : Replace all single slash \ with double slash \\ in that path



```
File Edit Selection View Go Run Terminal Help <- > db2 new
EXPLORER Flask-Application-With-IBM-Cloud-DB2-database > index.py ...
index.py
1 import os
2
3 | os.add_dll_directory('C:\\\\Users\\\\rohid\\\\OneDrive\\\\Desktop\\\\db2_new\\\\Flask-Application-With-IBM-Cloud-DB2-database\\\\myenv\\\\Lib\\\\site-packages')
4 |
5 import ibm_db
6 import ibm_db_dbi
7
8 from flask import *
9
10 app = Flask(__name__)
11
12
13 # connection parameters
14 dsn_hostname = "B15fa4db-dc03-4c70-869a-a9cc13f33084.bs2io9ol08kqbiodslcg.databases.appdomain.cloud"
15 dsn_uid = "ywco60234"
16 dsn_pwd = "WMAij8PAg9hBNQrj7"
17 dsn_driver = "(IBM DB2 ODBC DRIVER)"
18 dsn_database = "bludb"
19 dsn_port = "30367"
20 dsn_protocol = "TCP/IP"
21
22
23 #create database connection
24 #DO NOT MODIFY THIS CELL. Just RUN it with Shift + Enter
25 dsn = (
26     "DRIVER={0};"
27     "DATABASE={1};"
28     "HOSTNAME={2};"
29     "PORT={3};"
30     "PROTOCOL={4};"
31     "UID={5};"
32     "PWD={6};"
33     "SECURITY={7}").format(dsn_driver, dsn_database, dsn_hostname, dsn_port, dsn_protocol, dsn_uid, dsn_pwd, dsn_security)
24
25
26
27
28
29
30
31
32
33
34
TERMINAL
powershell
cmd
Microsoft Windows [Version 10.0.22631.4602]
(C) Microsoft Corporation. All rights reserved.
C:\Users\rohid\OneDrive\Desktop\db2_new>cd Flask-Application-With-IBM-Cloud-DB2-database
C:\Users\rohid\OneDrive\Desktop\db2_new\Flask-Application-With-IBM-Cloud-DB2-database>.\myenv\Scripts\activate
(myenv) C:\Users\rohid\OneDrive\Desktop\db2_new\Flask-Application-With-IBM-Cloud-DB2-database>
Ln 4, Col 1 (139 selected) Spaces: 4 UTF-8 CRLF Python 3.9.8 ENG IN 0140 PM 09-01-2025
```

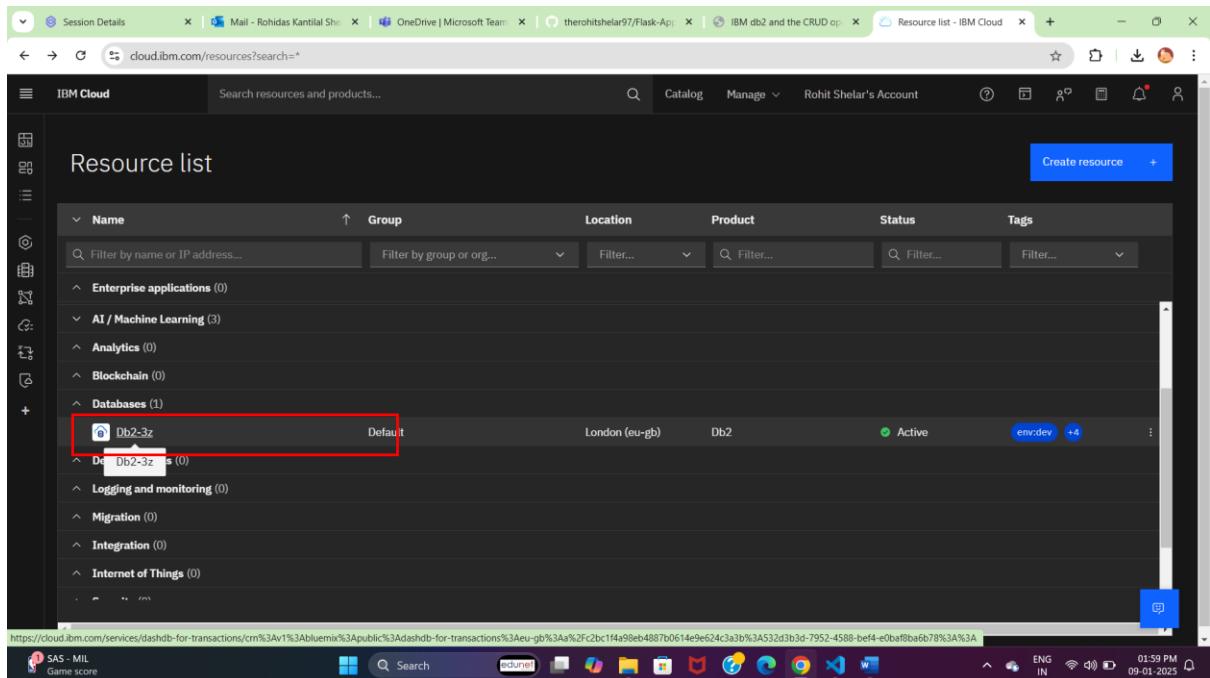
Step 23 : Now replace all connection parameter from code with your database parameter



```
File Edit Selection View Go Run Terminal Help <- > db2 new
EXPLORER Flask-Application-With-IBM-Cloud-DB2-database > index.py ...
index.py
1 import ibm_db_dbi
2
3 from flask import *
4
5 app = Flask(__name__)
6
7
8
9
10
11
12
13
14 dsn_hostname = "B15fa4db-dc03-4c70-869a-a9cc13f33084.bs2io9ol08kqbiodslcg.databases.appdomain.cloud"
15 dsn_uid = "ywco60234"
16 dsn_pwd = "WMAij8PAg9hBNQrj7"
17 dsn_driver = "(IBM DB2 ODBC DRIVER)"
18 dsn_database = "bludb"
19 dsn_port = "30367"
20 dsn_protocol = "TCP/IP"
21 dsn_security = "SSL"
22
23 #create database connection
24 #DO NOT MODIFY THIS CELL. Just RUN it with Shift + Enter
25 dsn = (
26     "DRIVER={0};"
27     "DATABASE={1};"
28     "HOSTNAME={2};"
29     "PORT={3};"
30     "PROTOCOL={4};"
31     "UID={5};"
32     "PWD={6};"
33     "SECURITY={7}").format(dsn_driver, dsn_database, dsn_hostname, dsn_port, dsn_protocol, dsn_uid, dsn_pwd, dsn_security)
24
25
26
27
28
29
30
31
32
33
34
TERMINAL
powershell
cmd
C:\Users\rohid\OneDrive\Desktop\db2_new>cd Flask-Application-With-IBM-Cloud-DB2-database
C:\Users\rohid\OneDrive\Desktop\db2_new\Flask-Application-With-IBM-Cloud-DB2-database>.\myenv\Scripts\activate
(myenv) C:\Users\rohid\OneDrive\Desktop\db2_new\Flask-Application-With-IBM-Cloud-DB2-database>
Ln 4, Col 1 (139 selected) Spaces: 4 UTF-8 CRLF Python 3.9.8 ENG IN 0143 PM 09-01-2025
```

Step 24 : Now Login to Cloud and Open your db2 service from resource then click on Db2 from database

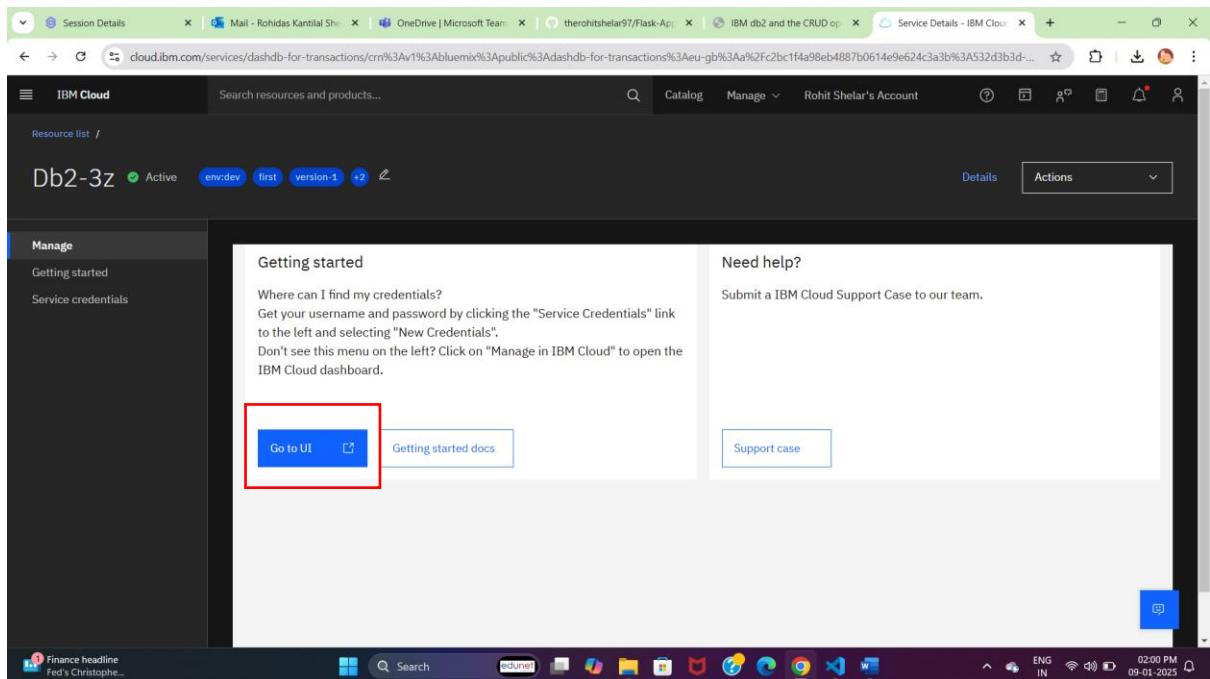
Note :- Hope you have already created db2 service using db2 documentation as I mention on Top



The screenshot shows the IBM Cloud Resource list interface. A specific service named "Db2-3z" is highlighted with a red box. The service details are as follows:

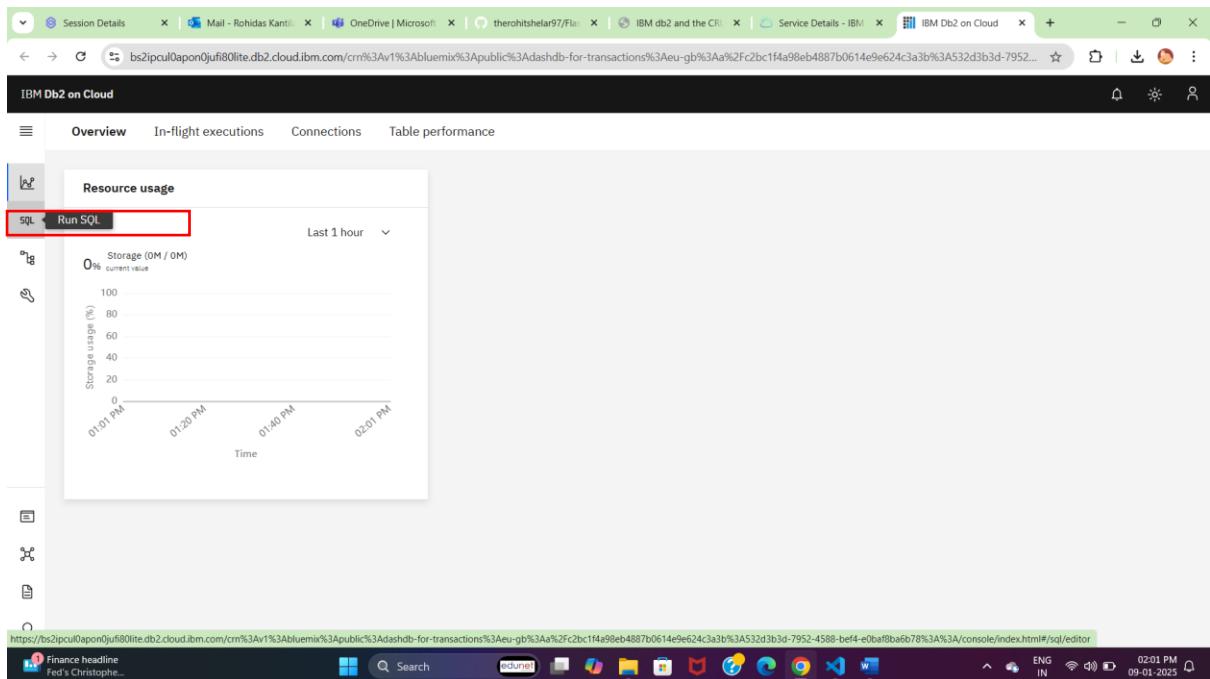
Name	Group	Location	Product	Status	Tags
Db2-3z	Default	London (eu-gb)	Db2	Active	env:dev +4

Step 25 : click on Go to UI



The screenshot shows the Service Details page for the "Db2-3z" service. The "Actions" tab is selected. On the left, there is a "Manage" sidebar with "Getting started" and "Service credentials" options. The main content area has a "Getting started" section with a "Go to UI" button, which is highlighted with a red box.

Step 26 : Click on SQL

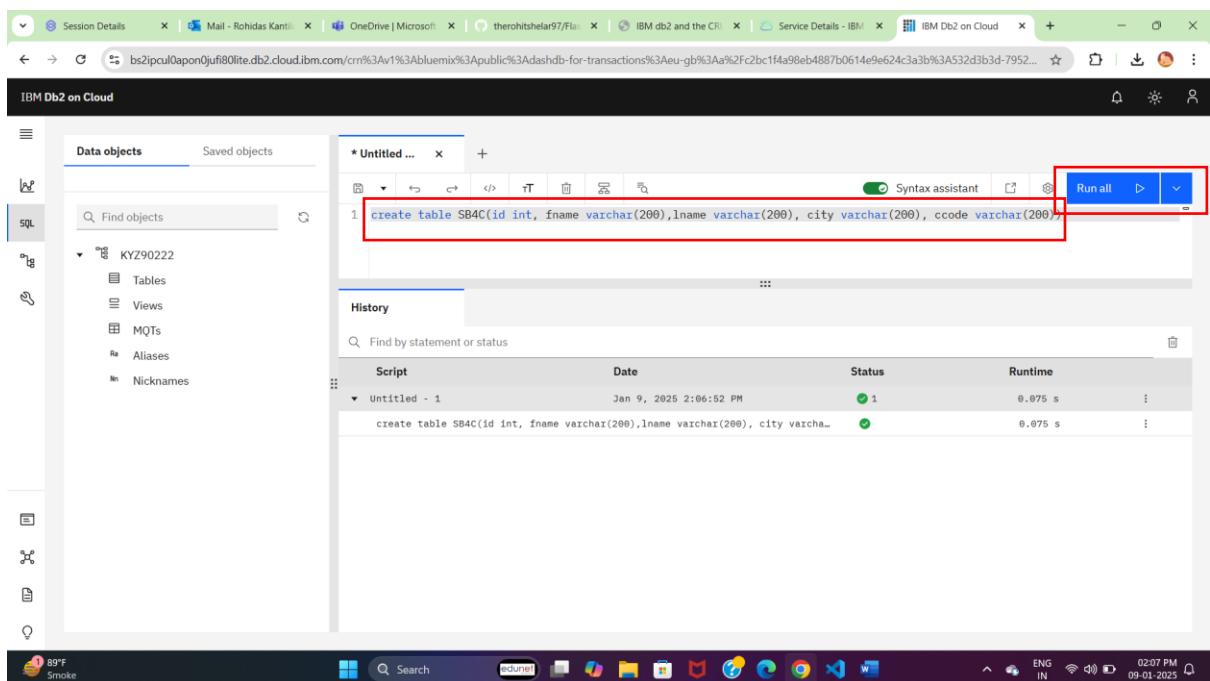


The screenshot shows the IBM Db2 on Cloud dashboard. The 'Resource usage' section is open, displaying a chart titled 'Storage usage (%)' over the last hour. The chart shows a constant 0% usage. Below the chart, there are several navigation links: Overview, In-flight executions, Connections, and Table performance. A red box highlights the 'Run SQL' button in the top left corner of the resource usage panel.

Step 27 : Create table using below query

```
create table SB4C(id int, fname varchar(200) ,lname varchar(200), city varchar(200),  
ccode varchar(200))
```

Then click on Run all



The screenshot shows the IBM Db2 on Cloud interface with the SQL editor open. The editor contains the following SQL code:

```
1 create table SB4C(id int, fname varchar(200) ,lname varchar(200), city varchar(200),  
ccode varchar(200))
```

A red box highlights the 'Run all' button in the top right corner of the editor window. The history panel below shows a single execution record for the 'create table' command.

Step 28 : here we have successfully created a table, Now to check table refresh the page and click on table

The screenshot shows the IBM Db2 on Cloud interface. On the left, the 'Data objects' sidebar is open, displaying a tree structure under 'KYZ90222'. A red box highlights the 'Tables' node, which contains an entry for 'SB4C'. To the right, a query editor window titled 'Untitled ...' shows the SQL command: 'create table SB4C(id int, fname varchar(200), lname varchar(200), city varchar(200), ccode varchar(200))'. The 'Run all' button is highlighted in blue.

Now connect this database with our Web Application

Step 29 : Now go to our previous tap

The screenshot shows the IBM Cloud Service Details page for the 'Db2-3z' service. The top navigation bar includes tabs for 'Service Details', 'Catalog', 'Manage', and 'Rohit Shelar's Account'. A red box highlights the 'Service Details' tab. The main content area has three sections: 'Getting started' (with links to 'Go to UI' and 'Getting started docs'), 'Need help?' (with a 'Support case' button), and a sidebar with 'Manage' options like 'Getting started' and 'Service credentials'. The bottom of the screen shows a Windows taskbar with various icons.

Step 30 : Click on service credentials -> New credential

The screenshot shows the IBM Cloud Service Details page for a service named 'Db2-3z'. On the left sidebar, the 'Service credentials' option is highlighted with a red box. On the right, under the heading 'Service credentials', there is a sub-section titled 'No service credentials' with the sub-instruction 'Credentials are provided in JSON format. The JSON snippet lists credentials, such as the API key and secret, as well as connection information for the service.' At the bottom right of this section, there is a blue button labeled 'New credential' with a '+' sign, which is also highlighted with a red box.

Step 31 : Click on Add

The screenshot shows the 'Create credential' dialog box. In the 'Name:' field, the value 'Service-credentials-1' is entered. In the 'Role:' dropdown, 'Manager' is selected. Under 'Select Service ID (Optional)', the note says 'A service ID identifies a service or application similar to how a user ID identifies a user. Choose the existing service ID your application will use to connect to the service.' and 'Auto Generate' is selected. At the bottom right of the dialog, there is a blue 'Create' button.

Step 32 : Click Arrow

The screenshot shows the IBM Cloud Service Details page for a service named 'Db2-3z'. On the left, there's a sidebar with 'Manage', 'Getting started', and 'Service credentials' selected. The main area is titled 'Service credentials' with a sub-instruction: 'You can generate a new set of credentials for cases where you want to manually connect an app or external consumer to an IBM Cloud service.' Below this is a table with columns 'Key name', 'Date created', and 'Controlled by'. A single row is listed: 'Service-credentials-1' (Date created: 2025-01-09 2:16 PM, Controlled by: Dashdb-for-transactions). A red box highlights the 'New credential' button at the top right of the table area.

Step 33 : Copy host name from here

The screenshot shows the same IBM Cloud Service Details page as before, but now the 'Service-credentials-1' row is expanded. The expanded view shows a JSON object with various connection parameters. A red box highlights the 'host' field, which contains the value '2d46b6b4-cbf6-40eb-bbce-6251e6ba9300.bs2io90108kqb1od81cg.databases.appdomain.cloud'. The rest of the JSON object includes fields like 'connection', 'arguments', 'bin', and 'certificate'.

```
{
  "connection": {
    "cli": {
      "arguments": [
        "-u",
        "kyz90222",
        "-p",
        "tk7TeXXY67jWbxS",
        "-ssl",
        "-sslCafile",
        "1dd14d0c-1b52-4f63-a606-53ecba28771d",
        "-authenticationDatabase",
        "-username",
        "-host",
        "2d46b6b4-cbf6-40eb-bbce-6251e6ba9300.bs2io90108kqb1od81cg.databases.appdomain.cloud"
      ],
      "bin": "db2",
      "certificate": {
        "certificate_base64": "LS0tLS1CRUdJTiBDRVJUSUZJQ0FURShtS9tCk1JSURVEND0wdXZ0f3SUJBZ01Vt3dvMC9va09CUEN5RjWeFjxV GhKRW9ubDRDv0RWlUpLb1pJaHjTJKFRRIwK01FBd9hqRWNNm9H0TTVRUF3d1RTVlpOSUV0c21zwtJRJz7tdGaV1TmxjekF1RncweU1EQTNRFF3T1wpVW wpNalpHnrcwek1EQTRRE13TpVM91qMFn0jRA5E8RYUjn11ZC0UNRtBs18TR0kFrzkwXnCRV1Ylehzb1Z6c1pTxdn20pTUwR0NTcjdTSW1zRFF0 kFRVUFBNElCRhdBd2dnRtUB91QCVFb0ZFNQ0SGd0oXZMUV1wR3xgOTB9amXQhM4NVBjTDNrystJN1R3K2diRUd0S1xJU0VZV3o4Y1g1TG1Xk0rY1Fn0 G9VeSsrOx130ExoxAdRZPqyv1tU2T1c1F4wTMb3BqeGRFVEZkWEhScnJhMGl2VmM4W42T11JlB7Hs1n103hrTGS5CMUffF09hbhYwDM2CnbdT0FcvXb8T Ifx1zhNpITRGeU9yR0Riajkxc14RGkAvy9XMvpdvhMNGwzXVLZUvCtRuZhJ3kySv3aUmKbGpM23RNh3zT0VhbpOUdsYktzSnJ1cnpNREFQlzlVUY nR1UUItyf1odTBRSVrZH1ESFYUEZGR0BH1y1o2a3M29.1dnPVZU13VC9uRH30TJNNC825kdFzWpK01pdfBTN3Y2a2d1UWhND1Ba1nJNxq0dUvplvzNOY"
      }
    }
}
```

Step 34 : and paste in code at dns_hostname

The screenshot shows a Microsoft Visual Studio Code (VS Code) interface. The left sidebar displays a file tree with a project named "Flask-Application-With-IBM-Cloud-DB2-database". The "index.py" file is open in the editor, containing Python code for a Flask application. A specific section of the code, which defines a database connection string, is highlighted with a red box:

```
    6 import ibm_db_dbi
    7
    8 from flask import *
    9
   10 app = Flask(__name__)
   11
   12
   13 # Connection parameters
   14 dsn_hostname = "0d46b6b4-cbf6-40eb-bbce-6251e6ba0300.bs2io90l08kqb1od8lcg.databases.appdomain.cloud"
   15 dsn_uid = "ywcl60234"
   16 dsn_pwd = "MAlj8PA9HBNQej7"
   17 dsn_driver = "{IBM DB2 ODBC DRIVER}"
   18 dsn_database = "bludb"
   19 dsn_port = "30367"
   20 dsn_protocol = "TCPIP"
   21 dsn_security = "SSL"
   22
   23 #Create database connection
   24 #DO NOT MODIFY THIS CELL. Just RUN it with Shift + Enter
   25 dsn = (
   26     "DRIVER={0};".format(dsn_driver)
```

The terminal below shows the output of running the application, indicating a successful connection to the database:

```
* Restarting with stat
Connected to database: bludb as user: ywcl60234 on host: 815fa4db-dc03-4c70-869a-a9cc13f33084.bs2io90l08kqb1od8lcg.databases.appdomain.cloud
* Debugger is active!
* Debugger PIN: 461-298-293
```

Step 35 : Copy Username from cloud

The screenshot shows the IBM Cloud Service Details page for a service named 'Db2-3z'. The left sidebar has a 'Service credentials' tab selected. The main area is titled 'Service credentials' with a sub-instruction: 'You can generate a new set of credentials for cases where you want to manually connect an app or external consumer to an IBM Cloud service.' A 'Learn more' link is provided. Below this, a table lists a single credential entry:

Key name	Date created	Controlled by
Service-credentials-1	2025-01-09 2:16 PM	Db2-for-transactions

The credential details are as follows:

```
{ "connection": { "cli": { "arguments": [ { "-u": "kyz99222", "-v": "tk7lExHXH67jWbxS", "--ssl", "--sslCAfile", "1dd1d4d0c-1b52-4f63-a606-53ecba28771d", "--authenticationDatabase", "admin", "--host", "2d46b6b4-cbf6-40eb-bbce-6251e6ba0300.bs2io90108kqbld8lcg.databases.appdomain.cloud:32328" } ] } }}
```

A red box highlights the value 'kyz99222' in the 'arguments' array under the 'cli' key.

Step 36 : Now again paste it in code at (dns_uid)

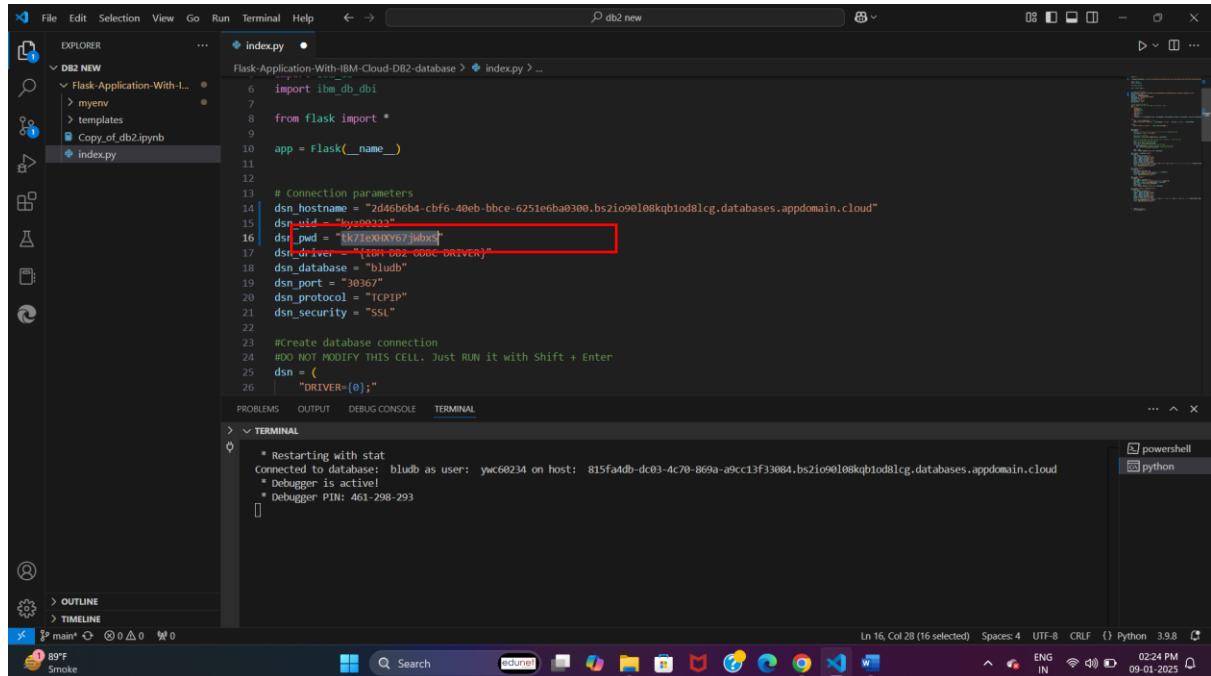
Step 37 : Copy password from cloud

The screenshot shows the IBM Cloud Service Details interface for a service named "Dashdb-for-transactions". The left sidebar has a "Service credentials" section selected. The main content area is titled "Service credentials" and contains a table with one row. The table columns are "Key name", "Date created", and "Controlled by". The row shows "Service-credentials-1" as the key name, "2025-01-09 2:16 PM" as the date created, and "Dashdb-for-transactions" as the controller. Below the table, a JSON object representing the connection details is displayed. A red box highlights the "password" field, which contains the value "tk7le0xIXy67jWbxS".

Key name	Date created	Controlled by
Service-credentials-1	2025-01-09 2:16 PM	Dashdb-for-transactions

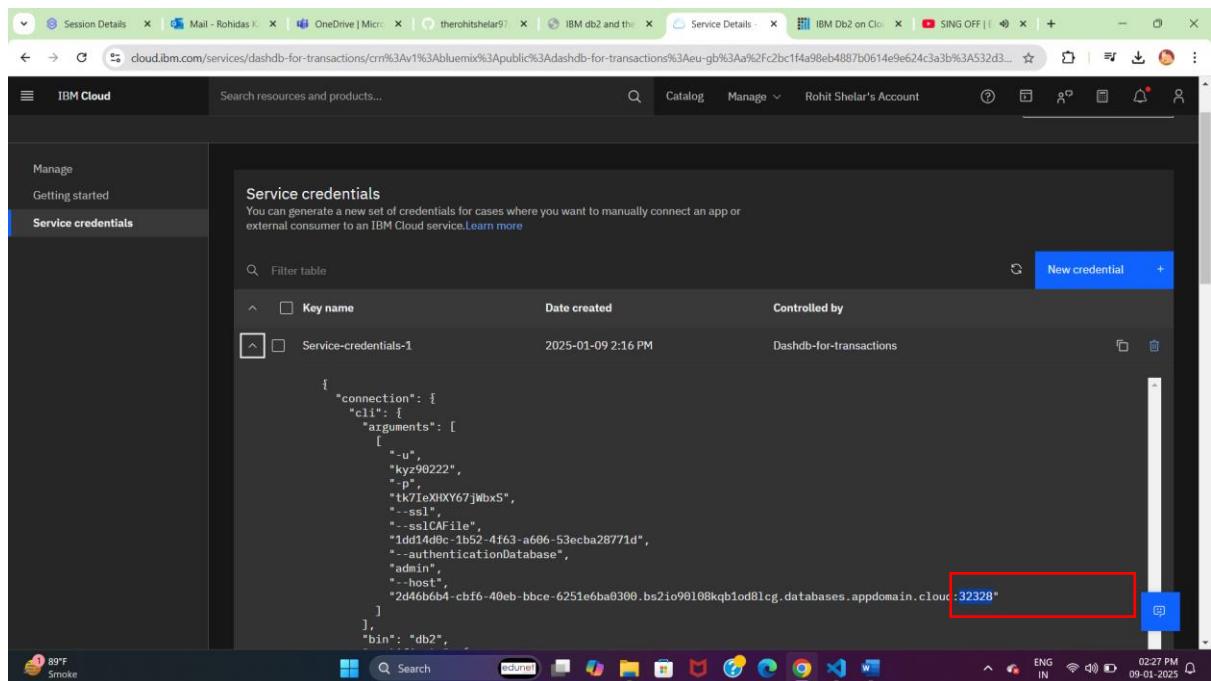
```
{  
  "connection": {  
    "cli": {  
      "arguments": [  
        [ // Red box highlights this line  
          "-u",  
          "kv-00222",  
          "-P",  
          "tk7le0xIXy67jWbxS",  
          "--",  
          "-sslcAfile",  
          "1d1d4d0c-1b52-4f63-a686-53ecba28771d",  
          "--authenticationDatabase",  
          "admin",  
          "--host",  
          "2d46b6b4-cbf6-40eb-bbce-6251e6ba0300.bs2io90108qb1od81cg.databases.appdomain.cloud:32328"  
        ]  
      ],  
      "bin": "db2",  
      "maxIdleTime": 60  
    }  
  }  
}
```

Step 38 : Paste in code



```
File Edit Selection View Go Run Terminal Help < > db2 new 08 10 11 12 13 # Connection parameters 14 dsn_hostname = "2d46b6b4-cbf6-40eb-bbce-6251e6ba0300.bs2io90108kqbiod8lcg.databases.appdomain.cloud" 15 dsn_uid = "ywc60234" 16 dsn_pwd = "tk7TeXKY67jWbx5" 17 dsn_driver = "{IBM DB2 ODBC DRIVER}" 18 dsn_database = "bludb" 19 dsn_port = "3036" 20 dsn_protocol = "TCPIP" 21 dsn_security = "SSL" 22 23 #Create database connection 24 #DO NOT MODIFY THIS CELL. Just RUN it with Shift + Enter 25 dsn = ( 26     "DRIVER={0};" 27 ) * Restarting with stat 28 Connected to database: bludb as user: ywc60234 on host: 815fa4db-dc03-4c70-869a-a9cc13f3084.bs2io90108kqbiod8lcg.databases.appdomain.cloud 29 * Debugger is active! 30 Debugger PIN: 461-298-293
```

Step 39 : Now just copy port number from cloud



Session Details | Mail - Rohidas K. | OneDrive | Microsoft Edge | therohitshelar97 | IBM db2 and the | Service Details - | IBM Db2 on Cloud | SING OFF | 02:27 PM | 09-01-2025

cloud.ibm.com/services/dashdb-for-transactions/crm%3Av1%3Abliuemix%3Apulic%3Adashdb-for-transactions%3Aeu-gb%3Aa%2Fc2bc1fa98eb4887b0614e9e624c3a%3b%3A532d3...

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Manage Getting started Service credentials

Service credentials You can generate a new set of credentials for cases where you want to manually connect an app or external consumer to an IBM Cloud service. Learn more

Filter table New credential +

Key name	Date created	Controlled by
Service-credentials-1	2025-01-09 2:16 PM	Dashdb-for-transactions

```
{ "connection": { "cli": { "arguments": [ "-u", "kyz90222", "-p", "tk7TeXKY67jWbx5", "-ss1", "-ss1CAfile", "1dd14d0c-1b52-4f63-a606-53ecba28771d", "-authenticationDatabase", "admin", "-host", "2d46b6b4-cbf6-40eb-bbce-6251e6ba0300.bs2io90108kqbiod8lcg.databases.appdomain.cloud:32328" ] }, "bin": "db2", "type": "db2" }}
```

Step 40 : paste port number and save the index.py using control-s or from file you can save it

The screenshot shows a Microsoft Visual Studio Code (VS Code) interface with the following details:

- File Explorer:** Shows a project named "Flask-Application-With-IBM-Cloud-DB2-database" containing files like "index.py", "myenv", "templates", "Copy_of_db2.ipynb", and "index.py".
- Code Editor:** The "index.py" file is open, showing Python code for connecting to an IBM DB2 database. A red box highlights the port number "92328" in the connection string.
- Terminal:** The terminal window shows the output of running the application. It includes a welcome message, connection details, and several log entries from the application server. One entry shows a "POST / HTTP/1.1" request with a status of 302.
- Status Bar:** Shows the current line (Ln 19), column (Col 18), selected text count (5 selected), and file encoding (UTF-8). It also displays icons for CRLF, Python, and version 3.9.8.

Note : Remaining keep as it is don't change

Step 41 : Now go in terminal and type (python index.py) to run the server

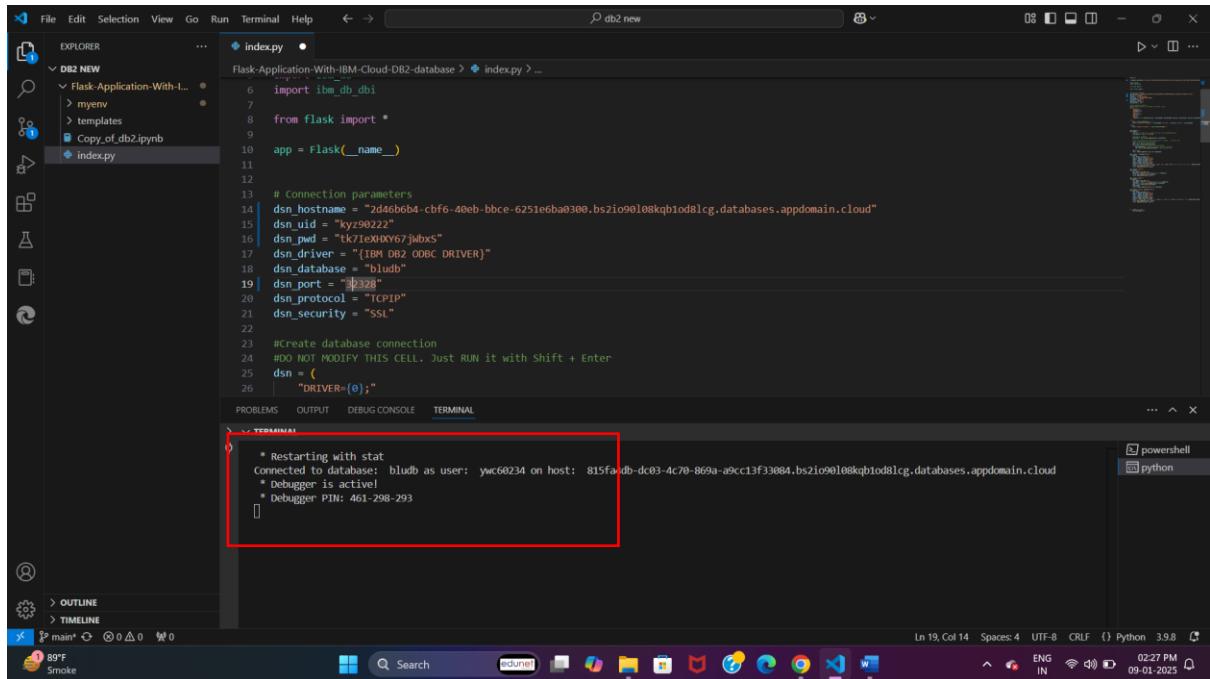
a. python index.py

The screenshot shows a code editor interface with the following details:

- File Explorer:** Shows a project structure under "DB2 NEW".
- Code Editor:** The file "index.py" is open, containing Python code for a Flask application. It includes connection parameters for an IBM Cloud DB2 database using the "ibm_db" module.
- Terminal:** The terminal window shows the command "python index.py" being run, with output indicating the application is restarting and connecting to the database.
- Status Bar:** Shows the current file is "index.py", the file has been modified ("M"), and the status bar indicates the file is 19 lines long, 4 spaces wide, in UTF-8 encoding, using CRLF line endings, and is written in Python.

```
File Edit Selection View Go Run Terminal Help < > db2 new ...  
EXPLORER ...  
DB2 NEW  
Flask-Application-With-IBM-Cloud-DB2-database > index.py > ...  
myenv  
templates  
Copy_of_db2.ipynb  
index.py M  
index.py M x  
Flask-Application-With-IBM-Cloud-DB2-database > index.py > ...  
6 import ibm_db  
7  
8 from flask import *  
9  
10 app = Flask(__name__)  
11  
12  
13 # Connection parameters  
14 dsn_hostname = "2d46b6b4-cbf6-40eb-bbce-6251e6ba0300.bs2io90108kqb1od8lcg.databases.appdomain.cloud"  
15 dsn_uid = "kyz90223"  
16 dsn_pwd = "tkZ1eX0XV67jwbxS"  
17 dsn_driver = "{IBM DB2 ODBC DRIVER}"  
18 dsn_database = "bludb"  
19 dsn_port = "32328"  
20 dsn_protocol = "TCP/IP"  
21 dsn_security = "SSL"  
22  
23 #Create database connection  
24 #DO NOT MODIFY THIS CELL. Just RUN it with Shift + Enter  
25 dsn = (  
    "DRIVER={0};"  
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL  
> TERMINAL  
* Restarting with stat  
Connected to database: bludb as user: ywc60234 on host: 815fa4db-dc03-4c70-869a-a9cc13f33084.bs2io90108kqb1od8lcg.databases.appdomain.cloud  
* Debugger is active!  
* Debugger PIN: 461-298-293  
* Detected change in 'C:\Users\rohid\Desktop\db2 new\Flask-Application-With-IBM-Cloud-DB2-database\index.py', reloading  
* Restarting with stat  
Connected to database: bludb as user: kyz90222 on host: 2d46b6b4-cbf6-40eb-bbce-6251e6ba0300.bs2io90108kqb1od8lcg.databases.appdomain.cloud  
* Debugger is active!  
* Debugger PIN: 461-298-293  
(myenv) C:\Users\rohid\Desktop\db2 new\Flask-Application-With-IBM-Cloud-DB2-database>python index.py  
02:31 PM 09-01-2025
```

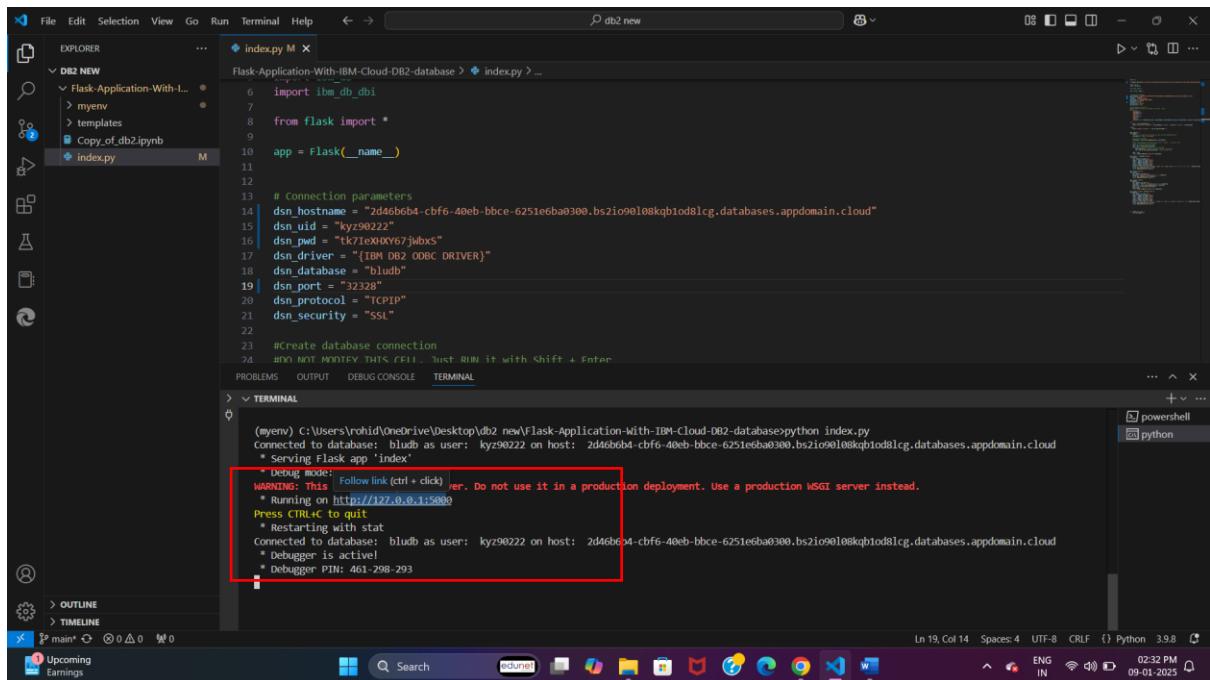
Now Server getting load



The screenshot shows the VS Code interface with the terminal tab active. The terminal output is as follows:

```
* Restarting with stat
Connected to database: bludb as user: yw60234 on host: 815fa...bs2i...cloud
* Debugger is active!
* Debugger PIN: 461-298-293
```

Here server run successfully



The screenshot shows the VS Code interface with the terminal tab active. The terminal output is as follows:

```
(myenv) c:\Users\rohid\OneDrive\Desktop\db2 new\Flask-Application-With-IBM-Cloud-DB2-database>python index.py
Connected to database: bludb as user: ky290222 on host: 2d46b6b4-cbf6-40eb-bbce-6251e6ba0300.bs2i090l08kqbiod8lcg.databases.appdomain.cloud
* Serving Flask app "index"
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on http://127.0.0.1:5000
Press CTRL+C to quit
* Restarting with stat
Connected to database: bludb as user: ky290222 on host: 2d46b6b4-cbf6-40eb-bbce-6251e6ba0300.bs2i090l08kqbiod8lcg.databases.appdomain.cloud
* Debugger is active!
* Debugger PIN: 461-298-293
```

Step 41 : Now server successfully run please open any web browser and type

<http://127.0.0.1:5000>

You will see this screen

The screenshot shows a web application titled "Web-Connections with DB2". On the left, there is a form titled "Enter Your Records" with fields for id, First_Name, Last_Name, City, and CCode. On the right, there is a table titled "See Your Records" with columns Id, First_Name, Last_Name, City, CCode, and Actions. The table currently has no data. At the bottom, there is a "Submit" button.

Id	First_Name	Last_Name	City	CCode	Actions

Step 42 : Enter the records and submit

The screenshot shows the same web application after records have been entered. The "Enter Your Records" form now contains the values: id=1, First_Name=Rohit, Last_Name=Shelar, City=Nashik, and CCode=CA. The "See Your Records" table now displays one row of data: Id=1, First_Name=Rohit, Last_Name=Shelar, City=Nashik, CCode=CA, and Actions=[].

Id	First_Name	Last_Name	City	CCode	Actions
1	Rohit	Shelar	Nashik	CA	[]

Session Data | Mail - Rohit | OneDrive | M | therohitshe | IBM db2 and | Service Detail | IBM Db2 on | emma he | Index

127.0.0.1:5000

Web-Connections with DB2

Enter Your Records

id:

First_Name :

Last_Name :

City :

City Code :

Submit

See Your Records

Id	First_Name	Last_Name	City	CCode	Actions
1	Rohit	Shelar	Nashik	CA	

Now perform all CRUD operation using web application