

IMPLEMENTING WEB APPLICATION

CREATE IBM DB2 AND CONNECT WITH PYTHON

Date	24 September 2022
Team ID	PNT2022TMID32100
Project Name	Smart Fashion Recommender Application
Maximum Marks	2 Marks

CREATE IBM DB2 AND CONNECT WITH PYTHON:

Create the IBM Db2 service in the IBM cloud and connect the python code with DB.

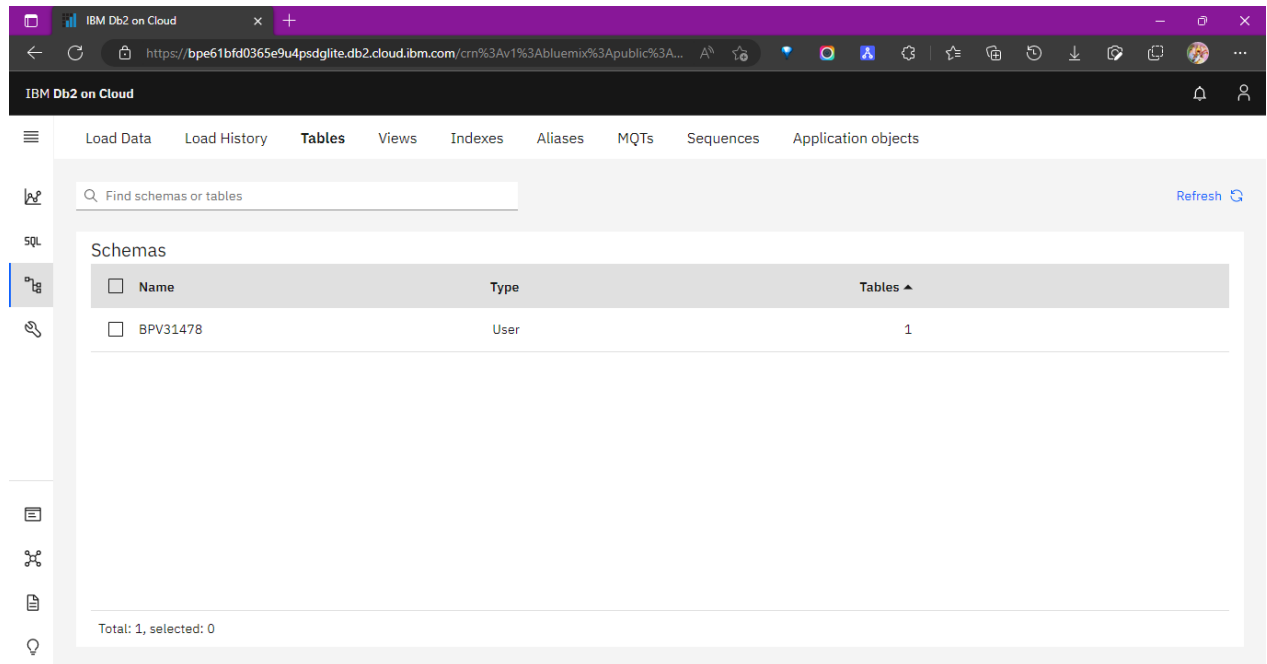
STEP 1: Create IBM DB2

STEP 2: Connect Python Code with DB2

STEP 3: Database Table of Register / Login Details

STEP 4: Directed to the Home Page

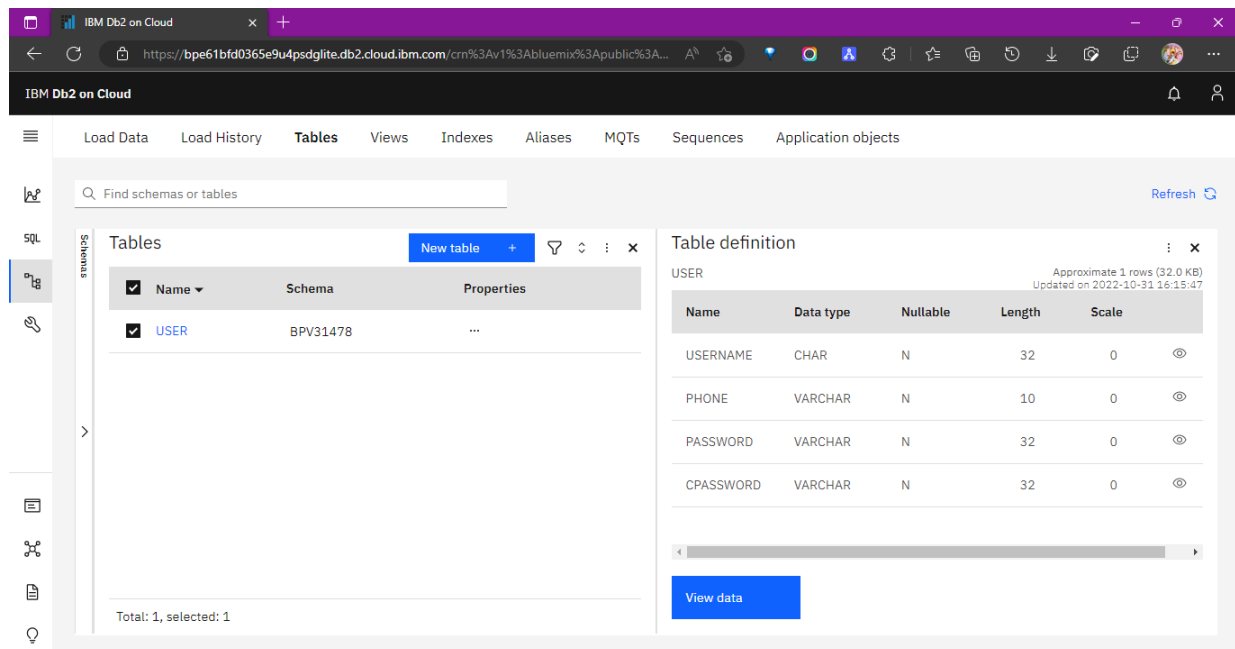
DB PIC 1: TABLE CREATED IN IBM-DB2



The screenshot shows the IBM Db2 on Cloud web interface. The top navigation bar includes tabs for Load Data, Load History, Tables, Views, Indexes, Aliases, MQTs, Sequences, and Application objects. The 'Tables' tab is selected. Below the navigation bar is a search bar labeled 'Find schemas or tables' and a 'Refresh' button. The main content area displays a table titled 'Schemas' with columns 'Name', 'Type', and 'Tables'. A single row is visible for the schema 'BPV31478' of type 'User', with '1' table listed. The bottom status bar indicates 'Total: 1, selected: 0'.

Name	Type	Tables
BPV31478	User	1

DB PIC 2: TABLE ATTRIBUTES



The screenshot shows the IBM Db2 on Cloud web interface with the 'Tables' tab selected. A table list on the left shows the 'USER' table under the 'BPV31478' schema. The 'Table definition' panel on the right displays the attributes of the 'USER' table. The table has approximately 1 row (32.0 KB) and was updated on 2022-10-31 16:15:47. The attributes are listed in a table with columns: Name, Data type, Nullable, Length, and Scale. A 'View data' button is visible at the bottom of the table definition panel.

Name	Data type	Nullable	Length	Scale
USERNAME	CHAR	N	32	0
PHONE	VARCHAR	N	10	0
PASSWORD	VARCHAR	N	32	0
CPASSWORD	VARCHAR	N	32	0

PYTHON FILE: APP.PY

```
1 from flask import Flask, render_template, request, redirect, url_for
2 import ibm_db
3
4 dsn_hostname = "b1bc1829-6f45-4cd4-bef4-10cf081900bf.cloud.ibm.com:30000"
5 dsn_uid = "hpe31478" # e.g. "abc12345"
6 dsn_pwd = "2Xp1m4d402uf5Rg1" # e.g. "7d0Z3hlt9XN6s001"
7 dsn_driver = "iDBDR2CL1"
8 dsn_database = "bludb" # e.g. "BLUDB"
9 dsn_port = "32304" # e.g. "32733"
10 dsn_protocol = "TCPIP" # i.e. "TCPIP"
11 dsn_security = "SSL" # i.e. "SSL"
12 dsn_cert = "DigiCertGlobalRootCA.crt"
13 dsn = ("DRIVER={0};" "DATABASE={1};" "HOSTNAME={2};" "PORT={3};" "PROTOCOL={4};" "UID={5};" "PWD={6};" "SECURITY={7};" "SSLServerCertificate={8};").format(dsn_driver, dsn_database, dsn_hostname, dsn_port, dsn_protocol, dsn_uid, dsn_pwd, dsn_security, dsn_cert)
14 conn = ibm_db.connect(dsn, "", "")
15 app = Flask(__name__)
16 @app.route("/", methods=['GET', 'POST'])
17 def regpage():
18     if request.method == 'POST':
19         USERNAME = request.form['username']
20         PHONE = request.form['phone']
21         PASSWORD = request.form['password']
22         CPASSWORD = request.form['cpassword']
23         insertQuery = "INSERT INTO USER VALUES ('"+USERNAME+"', '"+PHONE+"', '"+PASSWORD+"', '"+CPASSWORD+"')"
24         insertStmt = ibm_db.prepare(conn, insertQuery)
25         ibm_db.execute(insertStmt)
26         return redirect(url_for('loginpage'))
27     return render_template("register.html")
28 @app.route("/login", methods=['GET', 'POST'])
29 def loginpage():
30     if request.method == 'POST':
31         phone = request.form['phone']
32         password = request.form['password']
33         query = "select COUNT(*) from user where phone='"+phone+"' and password='"+password+"'"
34         stat5 = ibm_db.exec_immediate(conn, query)
35         row = ibm_db.fetch_tuple(stat5)
36         if(row[0] == 1):
37             return redirect(url_for('home_page'))
38         return render_template("login.html")
39 def home_page():
40     return render_template("dashboard.html")
41 if __name__ == '__main__':
42     app.run()
```

PAGE 1: Registration

Registration page

127.0.0.1:5000

Registration

Username	Phone Number
<input type="text" value="Shayu"/>	<input type="text" value="9894222470"/>
Password	Confirm Password
<input type="password" value="....."/>	<input type="password" value="....."/>

Register

PAGE 2: Login

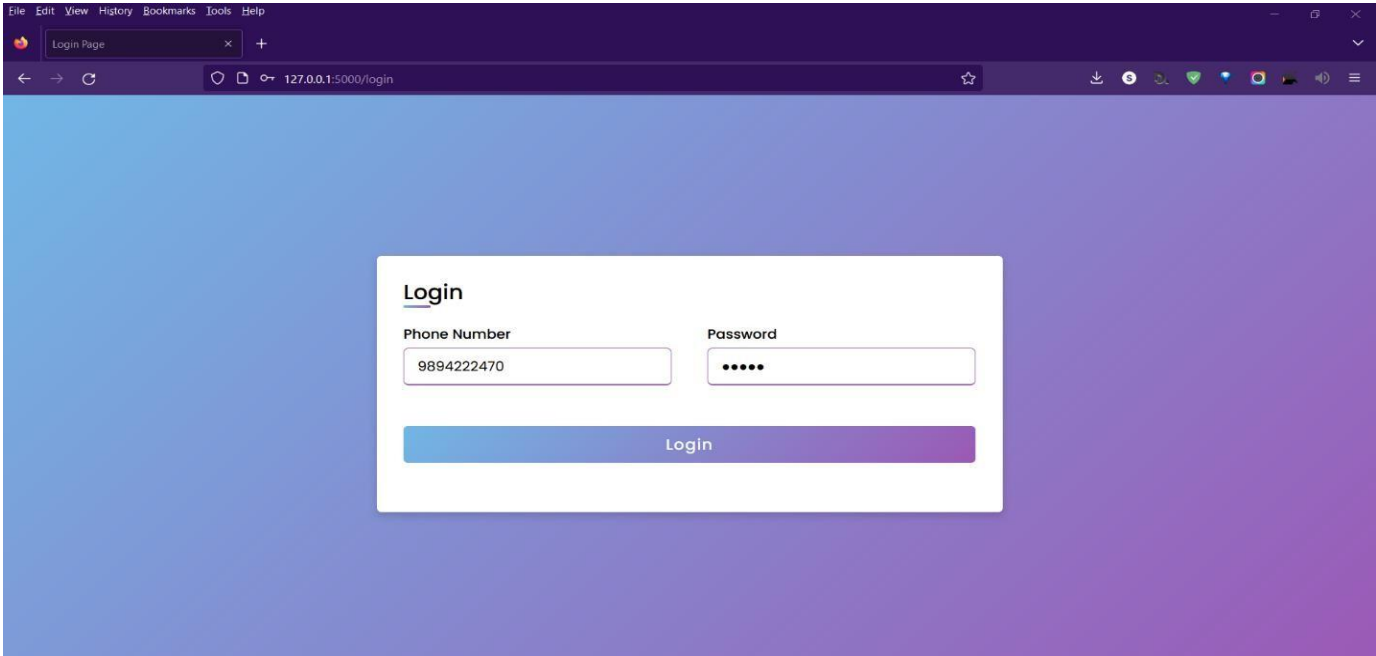
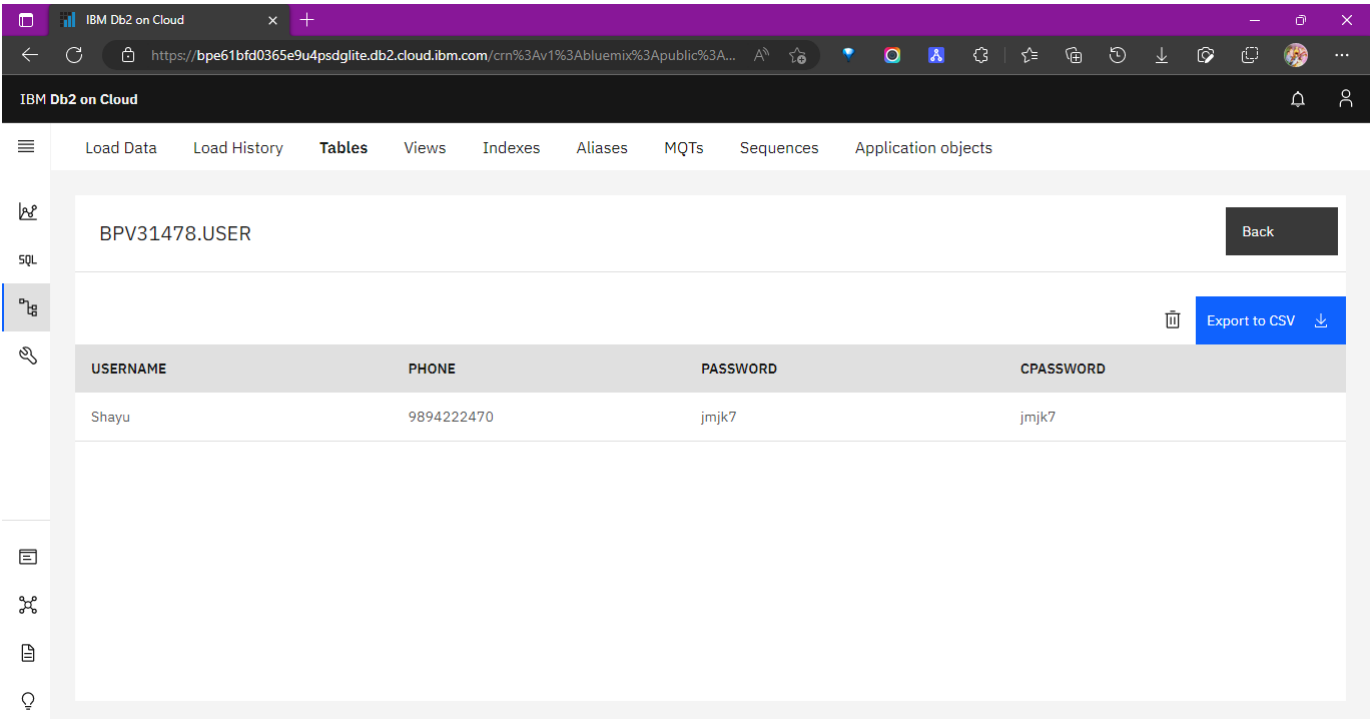


TABLE: DATABASE TABLE



DASHBOARD: Directed to PURPLE SPARKS

