

## ASSIGNMENT - 2

Assignment Date	22 September 2022
Student Name	Nivetha K
Student Roll Number	95071915031
Maximum Marks	2 Marks

### QUESTION:

1. Create User table with user with email, username, roll number, password.
2. Perform UPDATE, DELETE Queries with user table
3. Connect python code to db2.
4. Create a flask app with registration page, login page and welcome page. By default, load the registration page once the user enters all the fields store the data in database and navigate to login page authenticate user username and password. If the user is valid show the welcome page.

1. CREATE USER TABLE WITH USER WITH EMAIL, USERNAME, ROLL NUMBER, PASSWORD.

Service Details - IBM Cloud

IBM Db2 on Cloud

bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-south%3Aa%2F32ca3f09ab4a43dfb26083834aef30c0%3A372b5f9e-4481-4dfc...

IBM Db2 on Cloud

Load DataLoad HistoryTablesViewsIndexesAliasesMQTsSequencesApplication objects

Find schemas or tables

Refresh

Schemas

Tables

New table

Filter

Sort

Columns

Name	Schema	Properties
USER	CQR98172	...

Total: 1, selected: 0

Table definition

USER

No statistics available.

Name	Data type	Nullable	Length	Scale
ROLLNUMBER	INTEGER	Y		0
USERNAME	CHAR	Y	32	0
EMAIL	CHAR	Y	64	0
PASSWORD	VARCHAR	Y	32	0

View data

25°C Cloudy

ENG IN 2024 01-11-2022

Service Details - IBM Cloud

IBM Db2 on Cloud

bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-south%3Aa%2F32ca3f09ab4a43dfb26083834aef30c0%3A372b5f9e-4481-4dfc...

IBM Db2 on Cloud

Load DataLoad HistoryTablesViewsIndexesAliasesMQTsSequencesApplication objects

CQR98172.USER

Back

ROLLNUMBER

USERNAME

EMAIL

PASSWORD

There is no data here yet

25°C Cloudy

ENG IN 2025 01-11-2022

Service Details - IBM Cloud x IBM Db2 on Cloud x +

bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-south%3Aa%2F32ca3f09ab4a43dfb26083834aef30c0%3A372b5f9e-4481-4dfc...

IBM Db2 on Cloud

Data objects Saved objects

Filter objects

SQL CQR98172

\*Untitled - 1 x +

Syntax assistant Run all

```
1 INSERT INTO USER VALUES (1, 'Nivetha', 'nivenive@gmail.com ', 'nive@01');
2 INSERT INTO USER VALUES (2, 'Nivekrish', 'nivekrish@gmail.com ', 'krish@01');
```

History

Find history

Script	Date	Status	Runtime
Untitled - 1	Nov 1, 2022 8:30:34 PM	2	0.006 s
INSERT INTO USER VALUES (1, 'Nivetha', 'nivenive@gmail.com ', 'nive@01')			0.003 s
INSERT INTO USER VALUES (2, 'Nivekrish', 'nivekrish@gmail.com ', 'krish@01')			0.003 s

25°C Cloudy

ENG IN 20:30 01-11-2022

Service Details - IBM Cloud x IBM Db2 on Cloud x +

bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-south%3Aa%2F32ca3f09ab4a43dfb26083834aef30c0%3A372b5f9e-4481...

IBM Db2 on Cloud

Load Data Load History Tables Views Indexes Aliases MQTs Sequences Application objects

CQR98172.USER Back

Export to CSV

ROLLNUMBER	USERNAME	EMAIL	PASSWORD
1	Nivetha	nivenive@gmail.com	nive@01
2	Nivekrish	nivekrish@gmail.com	krish@01

25°C Cloudy

ENG IN 20:51 01-11-2022

## 2. PERFORM UPDATE, DELETE QUERIES WITH USER TABLE.

### UPDATE TABLE :

The screenshot shows the IBM Db2 on Cloud SQL editor interface. The left sidebar displays the 'Data objects' tab with a search filter and a list of objects, including 'CQR98172'. The main editor area shows a query in a tab titled '\*Untitled - 1':

```
1 UPDATE USER SET "PASSWORD" = 'Nkrish@01' WHERE ROLLNUMBER = '1';
```

Below the query editor is the 'History' tab, which shows a table of executed scripts:

Script	Date	Status	Runtime
Untitled - 1	Nov 1, 2022 8:53:32 PM	✓ 1	0.009 s
UPDATE USER SET "PASSWORD" = 'Nkrish@01' WHERE ROLLNUMBER = '1'		✓	0.009 s
Untitled - 1	Nov 1, 2022 8:51:56 PM	✓ 2	0.020 s

The screenshot shows the IBM Db2 on Cloud SQL editor interface with the 'Tables' tab selected. The table 'CQR98172.USER' is displayed. The table structure and data are as follows:

ROLLNUMBER	USERNAME	EMAIL	PASSWORD
1	Nivetha	nivenive@gmail.com	Nkrish@01
2	Nivekrish	nivekrish@gmail.com	krish@01

Thus, for ROLL NUMBER 1 the PASSWORD has been updated from "nive@01" to "Nkrish@01".

## DELETE TABLE :

The screenshot shows the IBM Db2 on Cloud SQL editor interface. The top navigation bar includes 'Service Details - IBM Cloud' and 'IBM Db2 on Cloud'. The main editor area displays a SQL script in a tab titled '\*Untitled - 1'. The script contains a single line: `DELETE FROM USER WHERE ROLLNUMBER = '2';`. Below the script editor, a 'History' panel shows the execution log. The table below represents the data in this history panel.

Script	Date	Status	Runtime
Untitled - 1	Nov 1, 2022 8:54:46 PM	✓ 1	0.011 s
DELETE FROM USER WHERE ROLLNUMBER = '2'		✓	0.011 s
Untitled - 1	Nov 1, 2022 8:53:32 PM	✓ 1	0.009 s
Untitled - 1	Nov 1, 2022 8:51:56 PM	✓ 2	0.020 s

The screenshot shows the IBM Db2 on Cloud SQL editor interface with the 'Tables' tab selected. The table 'CQR98172.USER' is displayed. The table structure and data are as follows:

ROLLNUMBER	USERNAME	EMAIL	PASSWORD
1	Nivetha	nivenive@gmail.com	Nkrish@01

Thus ROLLNUMBER 2 has been deleted.

### 3. CONNECT PYTHON CODE TO DB2.

\* NOTE:- Question 4 Contains Question 3 Answer

4. CREATE A FLASK APP WITH REGISTRATION PAGE, LOGIN PAGE AND WELCOME PAGE. BY DEFAULT, LOAD THE REGISTRATION PAGE ONCE THE USER ENTERS ALL THE FIELDS STORE THE DATA IN DATABASE AND NAVIGATE TO LOGIN PAGE AUTHENTICATE USER USERNAME AND PASSWORD. IF THE USER IS VALID SHOW THE WELCOME PAGE

## 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.clogj3sdtgtu0lqdc00.databases.appdomain.cloud"
5 dsn_uid = "bpu31478" # e.g. "abc12345"
6 dsn_pwd = "zKP9mhh8R2ufS8gT" # e.g. "7dRZ3hdt5XN6$00"
7 dsn_driver = "[IBMDB2CL1]"
8 dsn_database = "bludb"
9 dsn_port = "72304" # e.g. "32773"
10 dsn_protocol = "TCP/IP" # e.g. "TCP/IP"
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         stmts = ibm_db.exec_immediate(conn, query)
35         row = ibm_db.fetch_tuple(stmts)
36         if (row[0] == 1):
37             return redirect(url_for('home_page'))
38     return render_template("login.html")
39
40 def home_page():
41     return render_template("dashboard.html")
42 if __name__ == '__main__':
43     app.run()
```

## Register.html

```
1 <head>
2 <meta name="viewport" content="width=device-width, initial-scale=1.0">
3 <link rel="stylesheet" href="/static/style.css">
4 <title>Registration page </title>
5 </head>
6 <body>
7 <div class="container">
8 <div class="title">Registration</div>
9 <div class="content">
10 <form method="post">
11 <div class="user-details">
12 <div class="input-box">
13 <span class="details">Username</span>
14 <input type="text" placeholder="Enter your username" name="username" value="{{request.form['username']}}" required>
15 </div>
16 <div class="input-box">
17 <span class="details">Phone Number</span>
18 <input type="text" placeholder="Enter your number" name="phone" value="{{request.form['phone']}}" required>
19 </div>
20 <div class="input-box">
21 <span class="details">Password</span>
22 <input type="password" placeholder="Enter your password" name="password" value="{{request.form['password']}}" required>
23 </div>
24 <div class="input-box">
25 <span class="details">Confirm Password</span>
26 <input type="password" placeholder="Confirm your password" name="cpassword" value="{{request.form['cpassword']}}" required>
27 </div>
28 </div>
29 <div class="button"><input type="submit" value="Register"></div>
30 </form>
31 </div>
32 </div>
33 </body>
34 </html>
```

## Login.html

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta http-equiv="X-UA-Compatible" content="IE=edge">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <link rel="stylesheet" href="/static/style.css">
8   <link rel="stylesheet" href="{{url_for('static',filename='style.css')}}" type="text/css">
9   <title>Login Page</title>
10 </head>
11 <body>
12   <div class="container">
13     <div class="title">login</div>
14     <div class="content">
15       <form method="post" action="login">
16         <div class="user-details">
17           <div class="input-box">
18             <span class="details">Phone Number</span>
19             <input type="text" placeholder="Enter your number" name="phone" value="{{request.form['phone']}}" required>
20           </div>
21           <br>
22           <div class="input-box">
23             <span class="details">Password</span>
24             <input type="password" placeholder="Enter your password" name="password" value="{{request.form['password']}}" required>
25           </div>
26         </div>
27         <div class="button">
28           <input type="submit" value="Login">
29         </div>
30       </form>
31     </div>
32   </div></body>
33 </html>
```

## Style.css

```
1 *{
2   margin: 0;
3   padding: 0;
4   box-sizing: border-box;
5   font-family: 'Poppins', sans-serif;
6 }
7 body{
8   height: 100vh;
9   display: flex;
10  justify-content: center;
11  align-items: center;
12  padding: 10px;
13  background: linear-gradient(135deg, #71b7e6, #9b59b6);
14 }
15 .container{
16   max-width: 700px;
17   width: 100%;
18   background-color: #fff;
19   padding: 25px 30px;
20   border-radius: 5px;
21   box-shadow: 0 5px 10px rgba(0,0,0,0.15);
22 }
23 .container .title{
24   font-size: 25px;
25   font-weight: 500;
26   position: relative;
27 }
28 .container .title::before{
29   content: "";
30   position: absolute;
31   left: 0;
32   bottom: 0;
33   height: 3px;
34   width: 30px;
35   border-radius: 5px;
36   background: linear-gradient(135deg, #71b7e6, #9b59b6);
37 }
```

## OUTPUT :-

### Registration Page:-

Registration

Username

Shayu

Phone Number

9894222470

Password

.....

Confirm Password

.....

Register

### Login Page:-

Login

Phone Number

9894222470

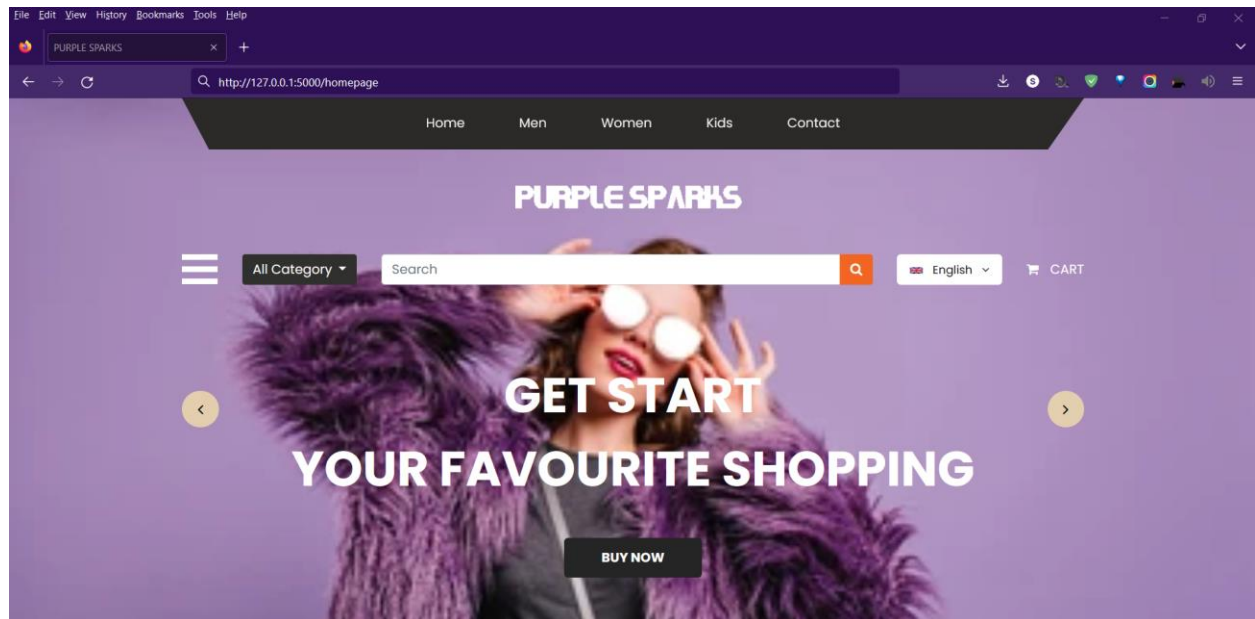
Password

.....

Login



## Welcome page:-



## Database Table :-

