

## ASSIGNMENT - 2

Assignment Date	22 September 2022
Student Name	SETHU VIKRAM
Student Roll Number	9787566070
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.

The screenshot shows the IBM Db2 on Cloud web interface. The 'Tables' tab is selected, and the 'USER' table is highlighted in the 'Tables' list. The 'Table definition' panel on the right shows the table's structure:

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

The table has approximately 1 row (32.0 KB) and was updated on 2022-10-26 17:19:49. A 'View data' button is visible at the bottom right of the table definition panel.

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File Edit View History Bookmarks Tools Help

IBM Db2 on Cloud

https://bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/cm/3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-sou

IBM Db2 on Cloud

Data objects Saved objects

Filter objects

RVK13400

\*Untitled - 1

Syntax assistant Run all

```
1 INSERT INTO USER VALUES (1,'Nandhitha Sree','nandhithasreeb@gmail.com','sree24@');
2 INSERT INTO USER VALUES (2,'Jeon Jimin','jikook@gmail.com','jikook@');
```

History

Find history

Script	Date	Status	Runtime
Untitled - 1	Nov 1, 2022 3:01:19 PM	2	0.009 s
INSERT INTO USER VALUES (1,'Nandhitha Sree','nandhithasreeb@gmail.com','sree24@');			0.005 s
INSERT INTO USER VALUES (2,'Jeon Jimin','jikook@gmail.com','jikook@');			0.004 s

File Edit View History Bookmarks Tools Help

IBM Db2 on Cloud

https://bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/cm/3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-sou

IBM Db2 on Cloud

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

RVK13400.USER

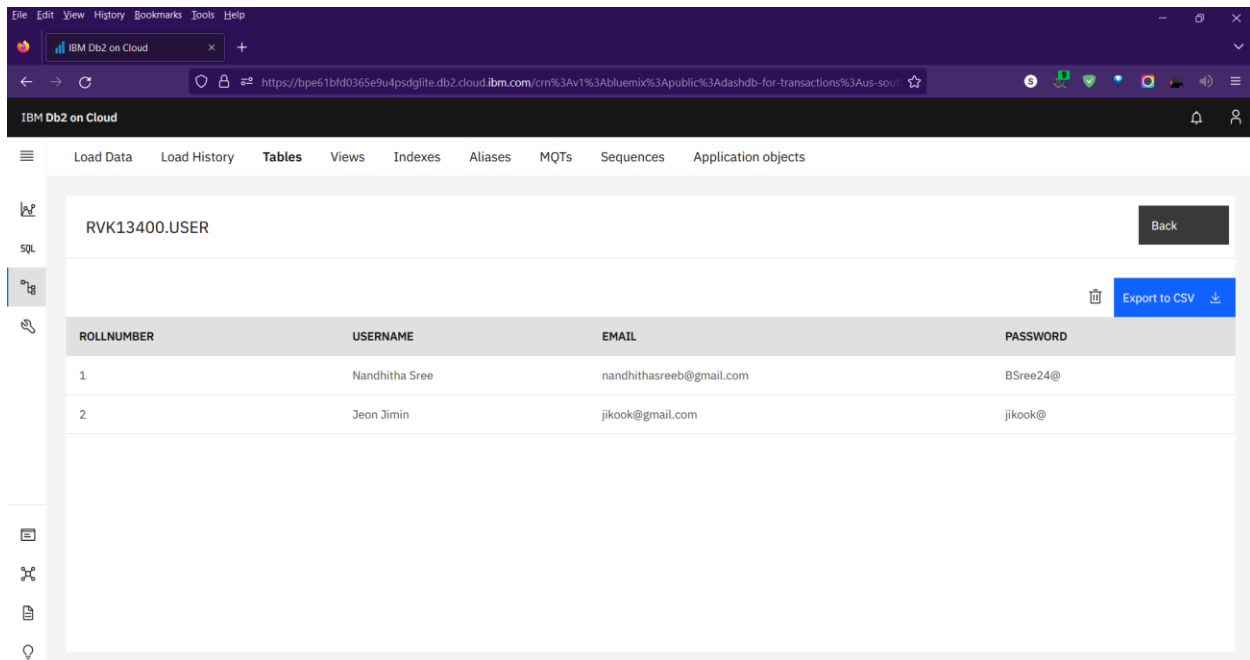
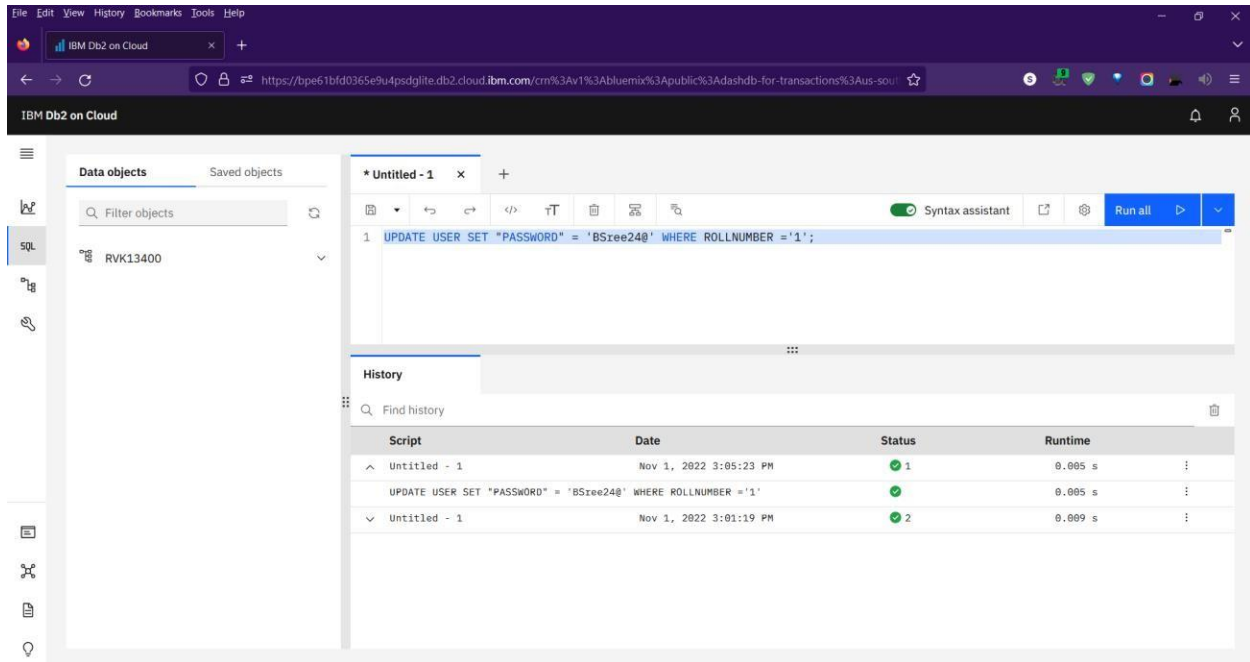
Back

Export to CSV

ROLLNUMBER	USERNAME	EMAIL	PASSWORD
1	Nandhitha Sree	nandhithasreeb@gmail.com	sree24@
2	Jeon Jimin	jikook@gmail.com	jikook@

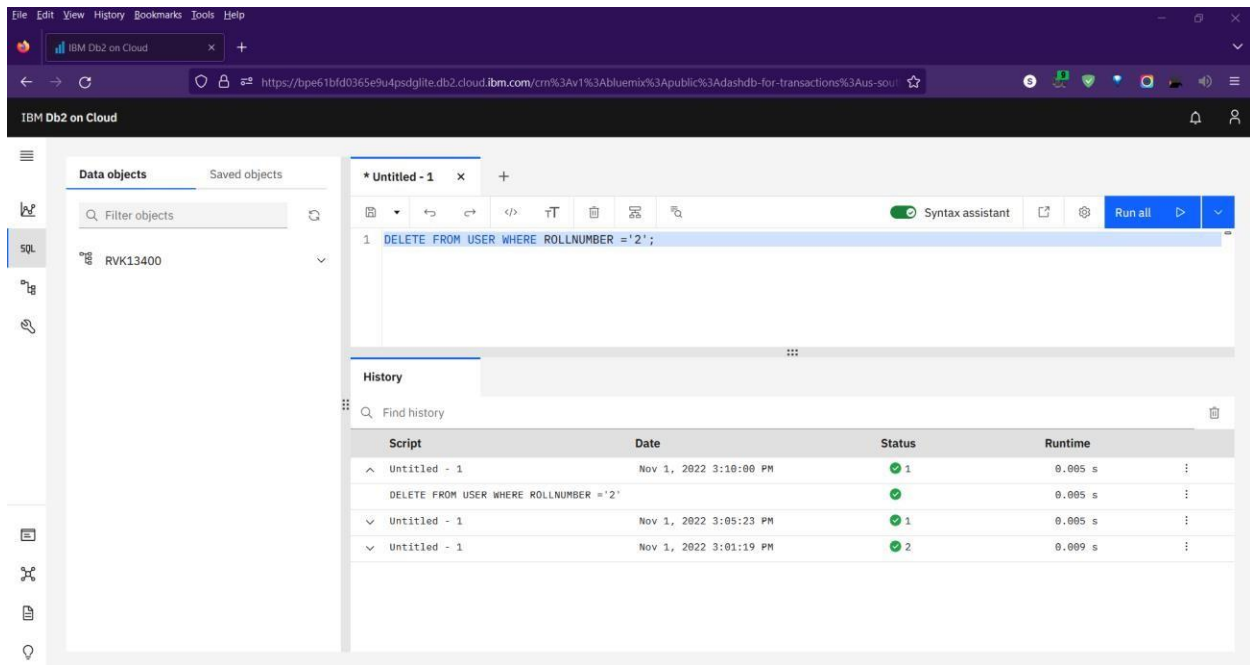
## 2. PERFORM UPDATE, DELETE QUERIES WITH USER TABLE.

### UPDATE TABLE:



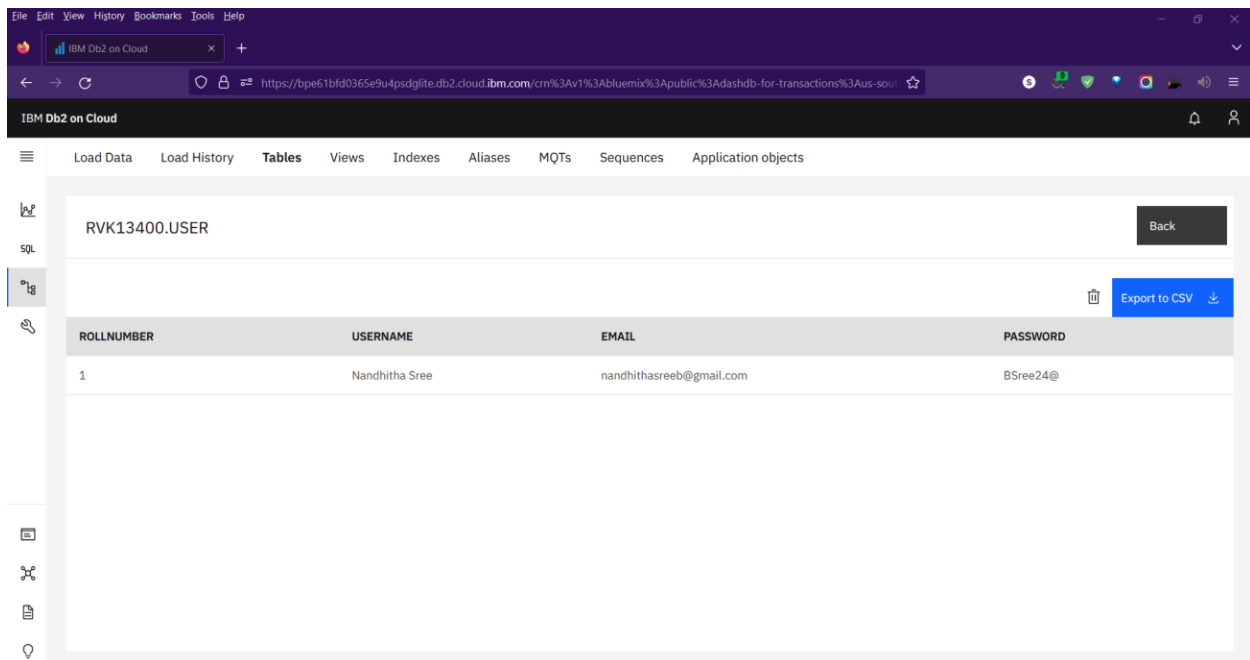
Thus, for ROLL NUMBER 1 the PASSWORD has been updated from "Sree24@" to "BSree24@".

## DELETE TABLE:



The screenshot shows the IBM Db2 on Cloud web interface. On the left, the 'Data objects' panel shows a table named 'RVK13400'. The main editor area shows a SQL script: `DELETE FROM USER WHERE ROLLNUMBER = '2';`. Below the editor, the 'History' panel displays a table of executed scripts.

Script	Date	Status	Runtime
Untitled - 1	Nov 1, 2022 3:10:00 PM	✓ 1	0.005 s
DELETE FROM USER WHERE ROLLNUMBER = '2'		✓	0.005 s
Untitled - 1	Nov 1, 2022 3:05:23 PM	✓ 1	0.005 s
Untitled - 1	Nov 1, 2022 3:01:19 PM	✓ 2	0.009 s



The screenshot shows the IBM Db2 on Cloud web interface displaying the contents of the 'RVK13400.USER' table. The table has four columns: ROLLNUMBER, USERNAME, EMAIL, and PASSWORD. The data shows that the user with ROLLNUMBER 1 is 'Nanditha Sree' with email 'nandithasreeb@gmail.com' and password 'BSree24@'.

ROLLNUMBER	USERNAME	EMAIL	PASSWORD
1	Nanditha Sree	nandithasreeb@gmail.com	BSree24@

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 & 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 = "61bc1829-6f45-4cd4-bef4-10cf081900bf.clogj3d0tyu0lqde00.databases.appdomain.cloud"
5 dsn_uid = "b9931478" # e.g. "abc12345"
6 dsn_pwd = "2X9HmAbk02u0sRqL" # e.g. "7dZ7hdt9X065o0"
7 dsn_driver = "IBMDB2CLI"
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,
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         insertStat = ibm_db.prepare(conn, insertQuery)
25         ibm_db.execute(insertStat)
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()
```

## 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 Pages</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: -**

The screenshot shows a web browser window with the title 'Registration page'. The address bar displays '127.0.0.1:5000'. The main content area features a registration form with the following fields and values:

Field	Value
Username	Shayu
Phone Number	9894222470
Password	.....
Confirm Password	.....

A blue button labeled 'Register' is positioned below the form fields.

**Login Page: -**

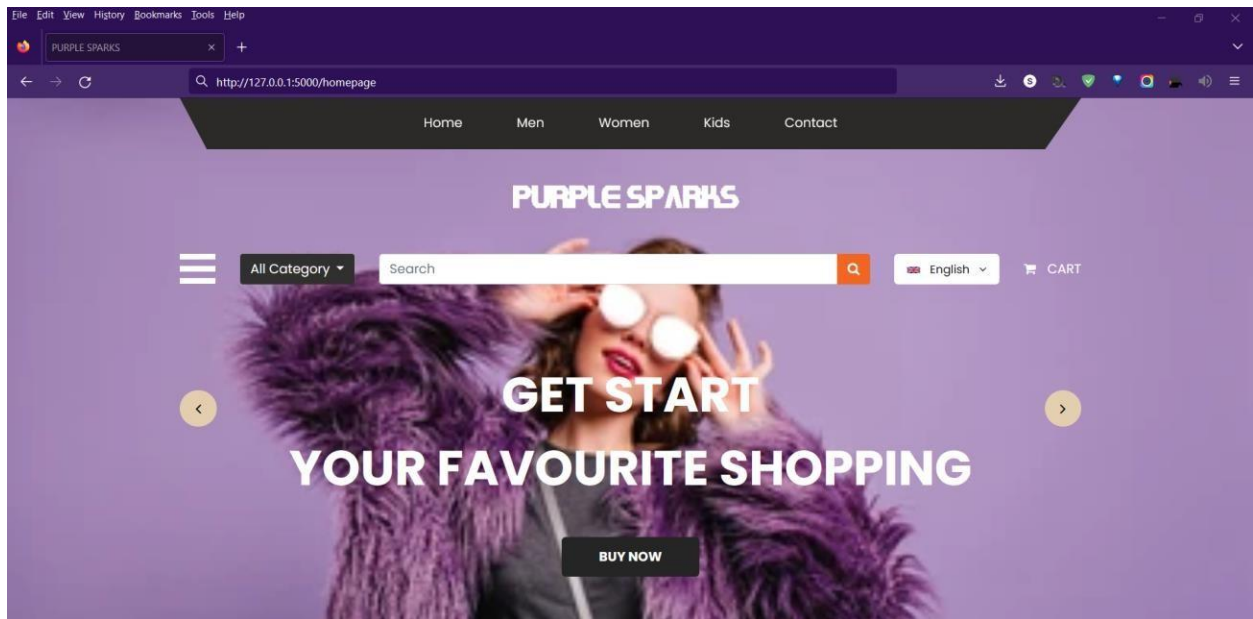
The screenshot shows a web browser window with the title 'Login Page'. The address bar displays '127.0.0.1:5000/login'. The main content area features a login form with the following fields and values:

Field	Value
Phone Number	9894222470
Password	.....

A blue button labeled 'Login' is positioned below the form fields.



## Welcome Page: -



## Database Table: -

A screenshot of the IBM Db2 on Cloud console. The browser address bar shows a URL starting with 'https://bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/'. The console interface has a top navigation bar with tabs: Load Data, Load History, Tables, Views, Indexes, Aliases, MQTs, Sequences, and Application objects. The 'Tables' tab is selected. On the left, there is a sidebar with icons for SQL, Tables, Views, Indexes, Aliases, MQTs, Sequences, and Application objects. The main area displays a table named 'BPV31478.USER'. There is a 'Back' button in the top right corner of the table view. Below the table name, there is an 'Export to CSV' button. The table has four columns: USERNAME, PHONE, PASSWORD, and CPASSWORD. There is one data row with the following values: Shayu, 9894222470, jmj7, and jmj7.

USERNAME	PHONE	PASSWORD	CPASSWORD
Shayu	9894222470	jmj7	jmj7