

# IBM ASSIGNMENT – 2

1. To create a user table with username, email, password, roll number

The screenshot displays the IBM Db2 on Cloud web interface. The top navigation bar includes 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. The 'Tables' tab is active, showing a list of tables under the 'TSM39609' schema. The 'USER' table is selected, and its definition is shown on the right. The table has four columns: ROLLNUMBER (VARCHAR, 32, nullable), EMAIL (VARCHAR, 32, nullable), USERNAME (VARCHAR, 32, nullable), and PASSWORD (VARCHAR, 32, nullable). Below the table definition, the 'View data' button is visible. The bottom part of the screenshot shows the 'USER' table data, with three rows of data. The 'Export to CSV' button is also visible.

ROLLNUMBER	EMAIL	USERNAME	PASSWORD
101	sherlin@gmail.com	sherlin	sher123
102	Aashir@yahoo.com	aash@16	140216
103	sheima@gmail.com	sheima	123\$

## 2. To perform UPDATE, DELETE queries with the user table

### UPDATE QUERY AND RESULTS

The screenshot shows the IBM Db2 on Cloud console with the 'Generate SQL' tab selected. The query editor contains the following SQL code:

```
1 UPDATE "TSM39609"."USER"  
2 SET  
3   "ROLLNUMBER" = '104',           --ROLLNUMBER  VARCHAR(32)  
4   "EMAIL" = 'sheima@gmail.com',   --EMAIL        VARCHAR(32)  
5   "USERNAME" = 'sheima12',        --USERNAME     VARCHAR(32)  
6   "PASSWORD" = 'sheima12@',      --PASSWORD     VARCHAR(32)  
7   --Search condition (e.g. WHERE "ROLLNUMBER" = NULL)  
8   WHERE "ROLLNUMBER" = '103';  
9
```

The 'Run all' button is visible on the right side of the query editor.

The screenshot shows the IBM Db2 on Cloud console with the 'Tables' tab selected. The table 'TSM39609.USER' is displayed. The results are as follows:

ROLLNUMBER	EMAIL	USERNAME	PASSWORD
101	sherlin@gmail.com	sherlin	sher123
102	Aashir@yahoo.com	aash@16	140216
104	sheima@gmail.com	sheima12	sheima12@

The 'Export to CSV' button is visible on the right side of the table.

# DELETE QUERY AND RESULTS

The screenshot shows the IBM Db2 on Cloud interface. The top navigation bar includes 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. The 'Tables' tab is selected, and the table 'TSM39609.USER' is displayed. The table has four columns: 'ROLLNUMBER', 'EMAIL', 'USERNAME', and 'PASSWORD'. The data is as follows:

ROLLNUMBER	EMAIL	USERNAME	PASSWORD
101	sherlin@gmail.com	sherlin	sher123
102	Aashir@yahoo.com	aash@16	140216
103	shalom@gmail.com	shal13	Sha@124

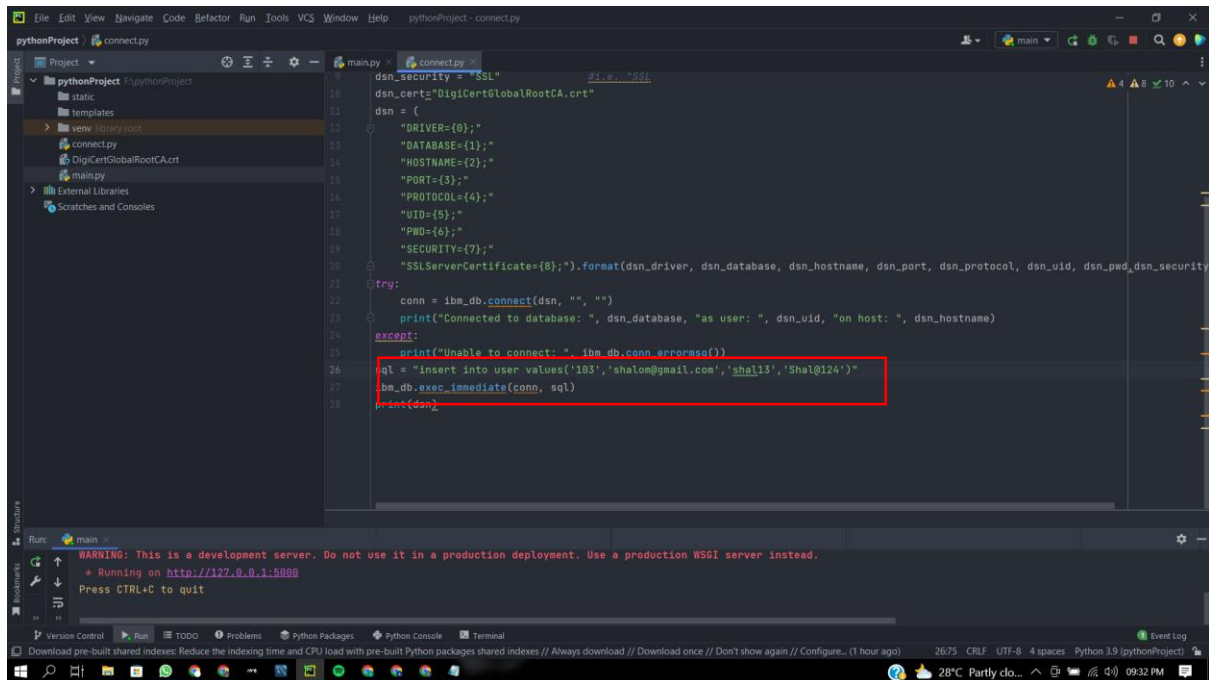
Buttons for 'Back' and 'Export to CSV' are visible in the top right corner of the table view.

The screenshot shows the 'Generate SQL' window in the IBM Db2 on Cloud interface. The window title is 'Generate SQL'. The SQL editor contains the following query:

```
1 DELETE FROM "TSM39609"."USER"  
2 --Search condition (e.g. WHERE "ROLLNUMBER" = NULL)  
3 WHERE "ROLLNUMBER" = '104';  
4
```

The 'Run all' button is highlighted in blue. The 'Syntax assistant' is enabled. The 'History' tab is visible at the bottom of the editor.

### 3. To connect python code to DB2



```
18 dsn_security = "SSL"
19 dsn_cert="DigiCertGlobalRootCA.crt"
20 dsn = {
21     "DRIVER={0};"
22     "DATABASE={1};"
23     "HOSTNAME={2};"
24     "PORT={3};"
25     "PROTOCOL={4};"
26     "UID={5};"
27     "PWD={6};"
28     "SECURITY={7};"
29     "SSLServerCertificate={8};".format(dsn_driver, dsn_database, dsn_hostname, dsn_port, dsn_protocol, dsn_uid, dsn_pwd, dsn_security)
30 }
31 try:
32     conn = ibm_db.connect(dsn, "", "")
33     print("Connected to database: ", dsn_database, "as user: ", dsn_uid, "on host: ", dsn_hostname)
34 except:
35     print("Unable to connect: ", _ibm_db.conn_errormsg())
36 sql = "insert into user values('105','shalom@gmail.com','shal13','Shal@124')"
37 db.execute(conn, sql)
38 print(conn)
```

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

### 4. To create a flask application with a registration page, login page, and welcome page.

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