

# ASSIGNMENT 2

Date	19 September 2022
Student Name	Sheima Latha. J
Student Roll Number	813819104090
Maximum Marks	2 Marks

1. Create user table with roll number, email, username, and password.

The screenshot shows the IBM Db2 on Cloud SQL editor interface. The top navigation bar includes 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. The 'Generate SQL' tab is active, displaying a SQL script to create a table named 'USER' with columns 'ROLLNUMBER', 'EMAIL', 'USERNAME', and 'PASSWORD'. The script is as follows:

```
1 INSERT
2 INTO "RBN46987"."USER" ("ROLLNUMBER", "EMAIL", "USERNAME", "PASSWORD")
3 VALUES(
4 '104', --ROLLNUMBER VARCHAR(32)
5 'nandhini@gmail.com', --EMAIL VARCHAR(32)
6 'nandnitherothrockstar', --USERNAME VARCHAR(32)
7 'nandhini104' --PASSWORD VARCHAR(32)
8 );
```

Below the script, the 'History' section shows a table of executed scripts:

Script	Date	Status	Runtime
Untitled - 1	Sep 29, 2022 7:21:38 AM	3	0.033 s
INSERT INTO "RBN46987"."USER" ("ROLLNUMBER", "EMAIL", "USERNAME", "PASSWORD") VALUES( '104', --ROLLNUM...			0.007 s

The screenshot shows the IBM Db2 on Cloud SQL editor interface with the 'USER' table selected. The table name 'RBN46987.USER' is displayed at the top. The table structure is shown as follows:

ROLLNUMBER	EMAIL	USERNAME	PASSWORD
101	lucysparkles@gmail.com	lucy	lucy101
102	daisy@gmail.com	daisy	daisy102
103	diego@gmail.com	diegothorider	diego103
104	nandhini@gmail.com	nandnitherothrockstar	nandhini104
105	aaron@gmail.com	aaron	aaron105
106	aarmalik@gmail.com	aarmalikaarmalik	aarmalik106

Thus, a table named “user” has been created and a few records have been inserted.

2. Perform UPDATE, DELETE Queries with user table.

Update:

IBM Db2 on Cloud

Load DataLoad HistoryTablesViewsIndexesAliasesMQTsSequencesApplication objects

Generate SQL

Back

\*Untitled - 1

SQL

Syntax assistantRun all

```
1 UPDATE "RBN46987"."USER"
2 SET
3 "USERNAME" = 'lucysparkles' --USERNAME VARCHAR(32)
4 --Search condition (e.g. WHERE "ROLLNUMBER" = NULL)
5 WHERE "USERNAME" = 'lucy' ;
6
```

History

Find history

Script	Date	Status	Runtime
^Untitled - 1	Sep 29, 2022 7:38:27 PM	1	0.011 s
UPDATE "RBN46987"."USER" SET "USERNAME" = 'lucysparkles' --USERNAME VARCHAR(32) --Search condition (e...			0.011 s

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RBN46987.USER

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Export to CSV

ROLLNUMBER	EMAIL	USERNAME	PASSWORD
101	lucysparkles@gmail.com	lucysparkles	lucy101
102	daisy@gmail.com	daisy	daisy102
103	diego@gmail.com	diegothorider	diego103
104	nandhini@gmail.com	nandhinithe rockstar	nandhini104
105	aaron@gmail.com	aaron	aaron105
106	aarmalik@gmail.com	aarmalikaarmalik	aarmalik106

The USERNAME has been updated to “lucysparkles” in the table.

Delete:

IBM Db2 on Cloud

Load Data

Load History

Tables

Views

Indexes

Aliases

MQTs

Sequences

Application objects

Generate SQL

Back

\*Untitled - 1

Syntax assistant

Run all

```

1 DELETE FROM "RBN46987"."USER"
2 --Search condition (e.g. WHERE "ROLLNUMBER" = NULL)
3 WHERE "ROLLNUMBER" = '102';
4

```

History

Find history

Script	Date	Status	Runtime
^ Untitled - 1	Sep 29, 2022 7:42:31 PM	✓ 1	0.008 s
DELETE FROM "RBN46987"."USER" --Search condition (e.g. WHERE "ROLLNUMBER" = NULL) WHERE "ROLLNUMBER" = '102';		✓	0.008 s

IBM Db2 on Cloud

Load DataLoad HistoryTablesViewsIndexesAliasesMQTsSequencesApplication objects

SQL

Tables

RBN46987.USER

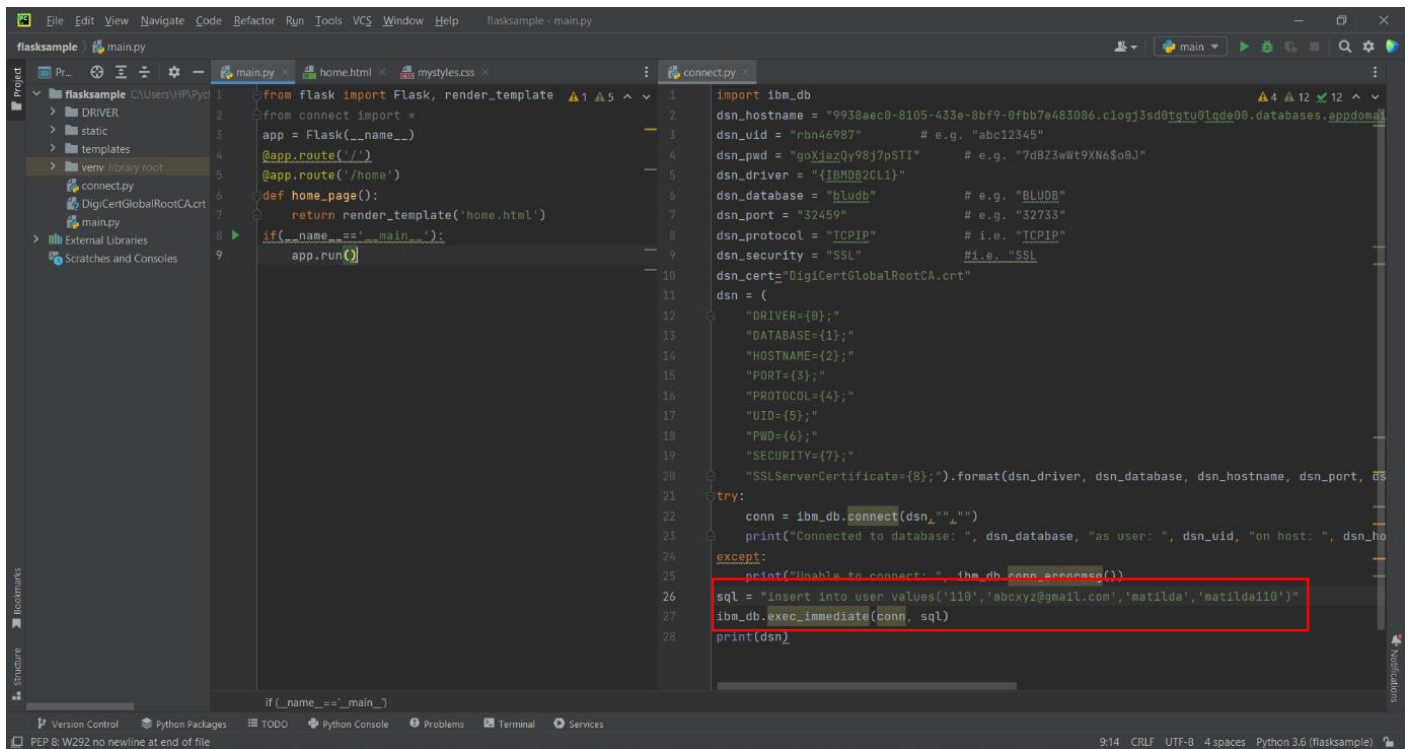
Back

Export to CSV

ROLLNUMBER	EMAIL	USERNAME	PASSWORD
101	lucysparkles@gmail.com	lucysparkles	lucy101
103	diego@gmail.com	diegothorider	diego103
104	nandhini@gmail.com	nandhinitherockstar	nandhini104
105	aaron@gmail.com	aaron	aaron105
106	aarmalik@gmail.com	aarmalikaarmalik	aarmalik106

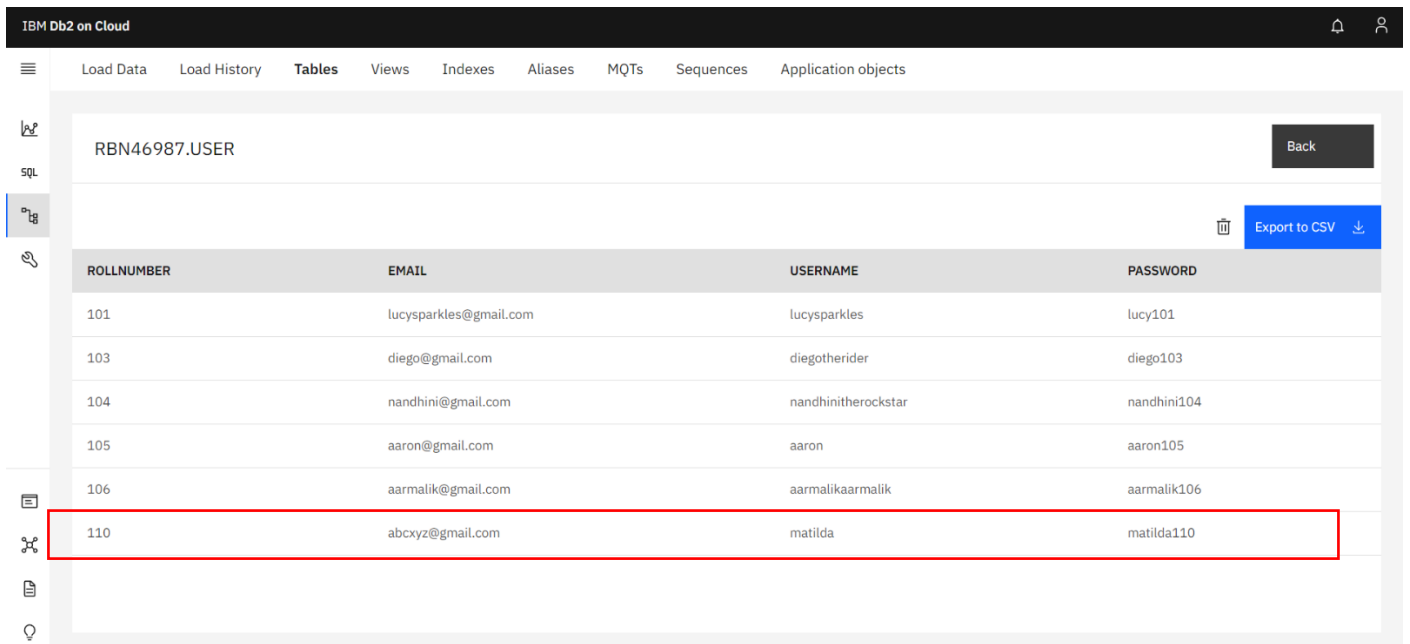
The row with ROLLNUMBER as 102 is missing from the table since it has been deleted.

### 3. Connect python code to db2.



```
1 from flask import Flask, render_template
2 from connect import *
3 app = Flask(__name__)
4 @app.route('/')
5 @app.route('/home')
6 def home_page():
7     return render_template('home.html')
8 if __name__ == '__main__':
9     app.run()
```

```
1 import ibm_db
2 dsn_hostname = "9938aec0-8105-433e-8bf9-0fbb7e463086.clogj3sd0tgru0lqde00.databases.appdomain1
3 dsn_uid = "rbn46987" # e.g. "abc12345"
4 dsn_pwd = "goXiazQy98j7pSTI" # e.g. "7d8Z3wWt9XN6$09J"
5 dsn_driver = "{IBMDB2CL1}"
6 dsn_database = "bludb" # e.g. "BLUDB"
7 dsn_port = "32459" # e.g. "32733"
8 dsn_protocol = "TCPIP" # i.e. "TCPIP"
9 dsn_security = "SSL" # i.e. "SSL"
10 dsn_certs="DigiCertGlobalRootCA.crt"
11 dsn = (
12     "DRIVER={0};"
13     "DATABASE={1};"
14     "HOSTNAME={2};"
15     "PORT={3};"
16     "PROTOCOL={4};"
17     "UID={5};"
18     "PWD={6};"
19     "SECURITY={7};".format(dsn_driver, dsn_database, dsn_hostname, dsn_port, dsn_protocol, dsn_uid, dsn_pwd, dsn_security, dsn_certs)
20 )
21 try:
22     conn = ibm_db.connect(dsn, "", "")
23     print("Connected to database: ", dsn_database, "as user: ", dsn_uid, "on host: ", dsn_hostname)
24 except:
25     print("Unable to connect: ", ibm_db.conn_errormsg())
26 sql = "insert into user values('110','abcxyz@gmail.com','matilda','matilda110')"
27 ibm_db.exec_immediate(conn, sql)
28 print(dsn)
```



ROLLNUMBER	EMAIL	USERNAME	PASSWORD
101	lucysparkles@gmail.com	lucysparkles	lucy101
103	diego@gmail.com	diegothorider	diego103
104	nandhini@gmail.com	nandhinitheerockstar	nandhini104
105	aaron@gmail.com	aaron	aaron105
106	aarmalik@gmail.com	aarmalikaarmalik	aarmalik106
110	abcxyz@gmail.com	matilda	matilda110

Thus, the python code (filename: connect.py) has been successfully connected with 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's username and password. If the user is valid show the welcome page.



## REGISTRATION FOR CLASSWORK

## LOGIN TO YOUR CLASSWORK

YOU HAVE BEEN SUCCESSFULLY LOGGED IN!!! Once the professors post your assignment, you can view here

IBM Db2 on Cloud				
<div> <div>Load Data</div> <div>Load History</div> <div>Tables</div> <div>Views</div> <div>Indexes</div> <div>Aliases</div> <div>MQTs</div> <div>Sequences</div> <div>Application objects</div> </div>				
<div> <div>RBN46987.USER</div> <div>Back</div> </div>				
<div> <div>Export to CSV</div> </div>				
ROLLNUMBER	EMAIL	USERNAME	PASSWORD	
105	aaron@gmail.com	aaron	aaron105	
106	aarmalik@gmail.com	aarmalikaarmalik	aarmalik106	
110	abcxyz@gmail.com	matilda	matilda110	
118	matthewperry@gmail.com	mathewp	mondler20	
126	barathy1601@gmail.com	barathy	DhArShiNi\$1624	
138	mdsyed@gmail.com	mohammadsyed	syed786	
145	sahanasahana123@gmail.com	sahana	s1a2h3a4	
157	suprajageorge@gmail.com	supraja	praja\$geor157	

The respective codes have been uploaded (Files: main.py, registration.py, login.py, welcome.py, mystyles.css, connect.py).