

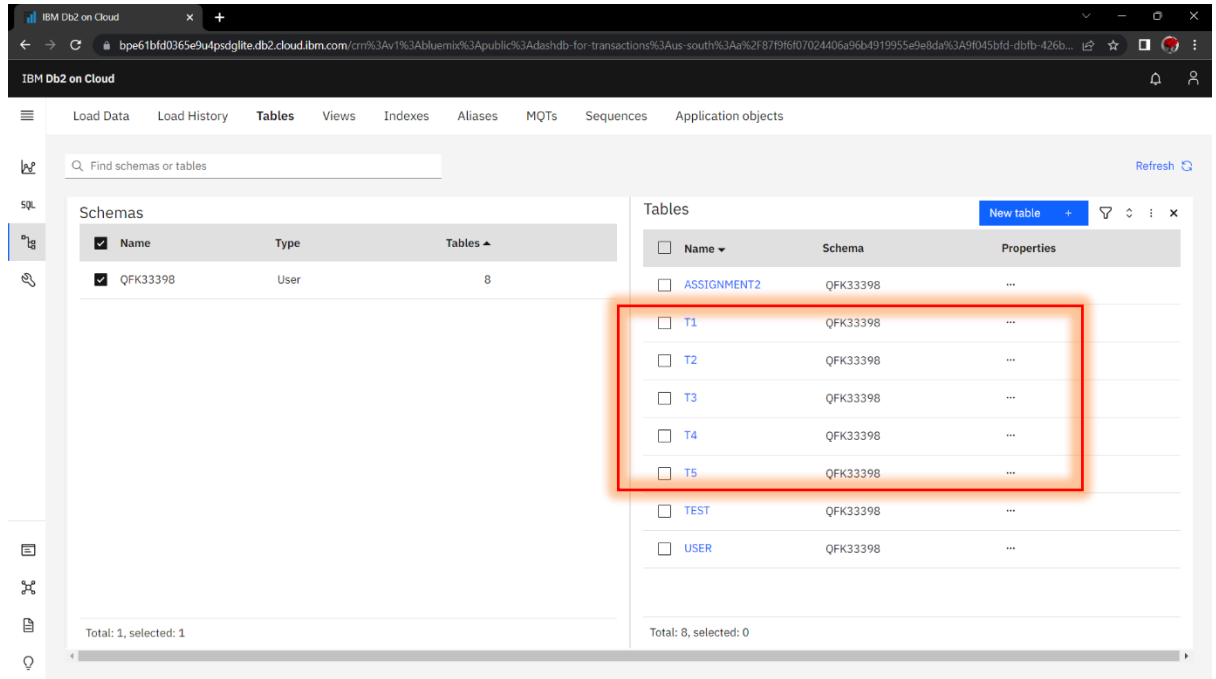
# ASSIGNMENT - 2

**TEAM ID** : PNT2022TMID16623

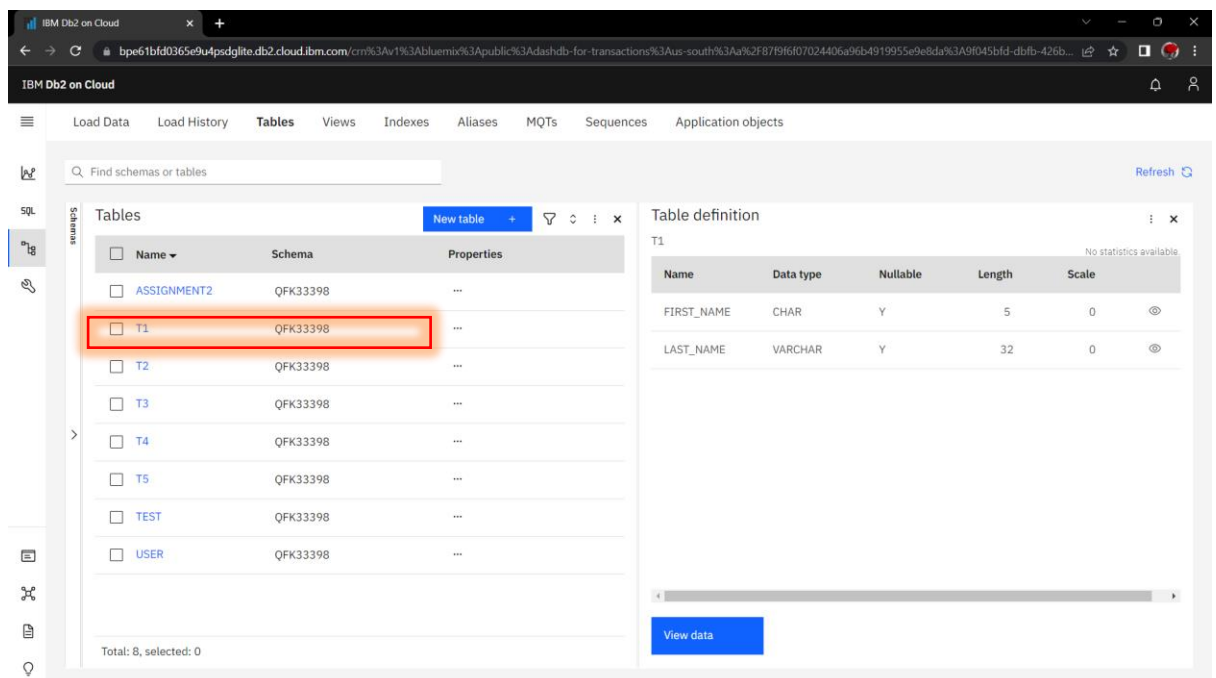
**PROJECT NAME** : SMART FASHION RECOMMENDER APPLICATION

## 1.CREATE 5 TABLES IN IBM db2 and insert data by using insert query.

TABLE NAMES : T1 , T2 , T3 ,T4 ,T5.

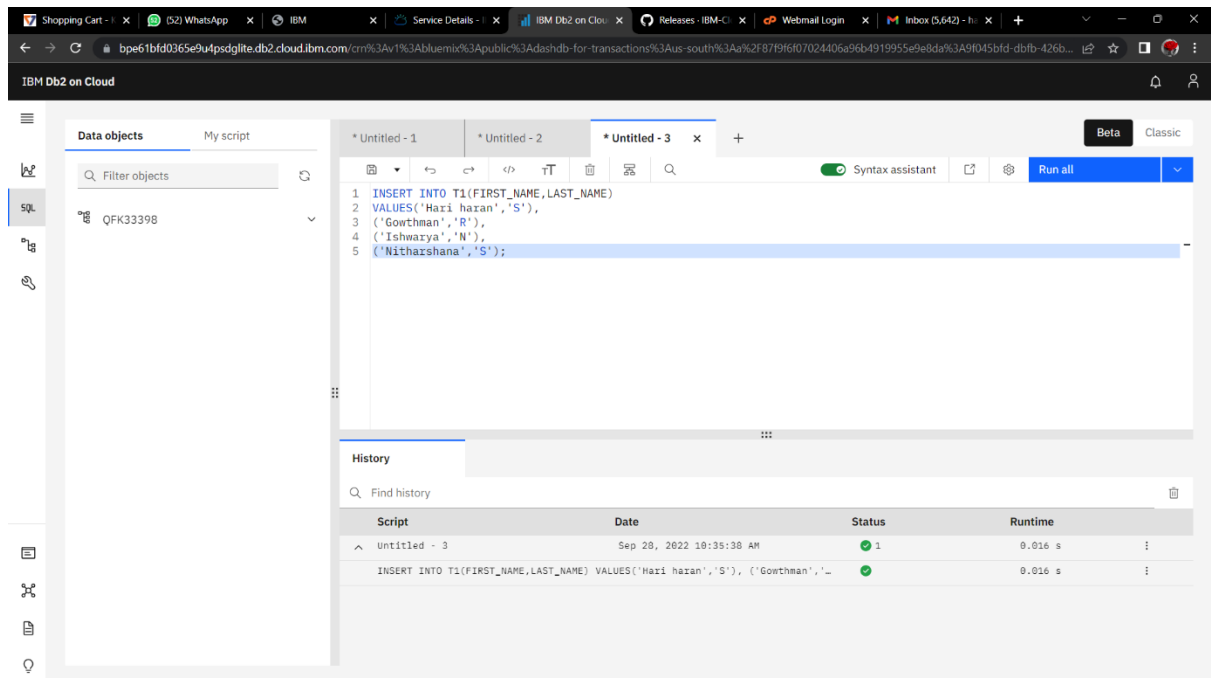


T1:



QUERY :

```
INSERT INTO T1(FIRST_NAME, LAST_NAME)
VALUES('Hari haran','S'),
('Gowthman','R'),
('Ishwarya','N'),
('Nitharshana','S');
```

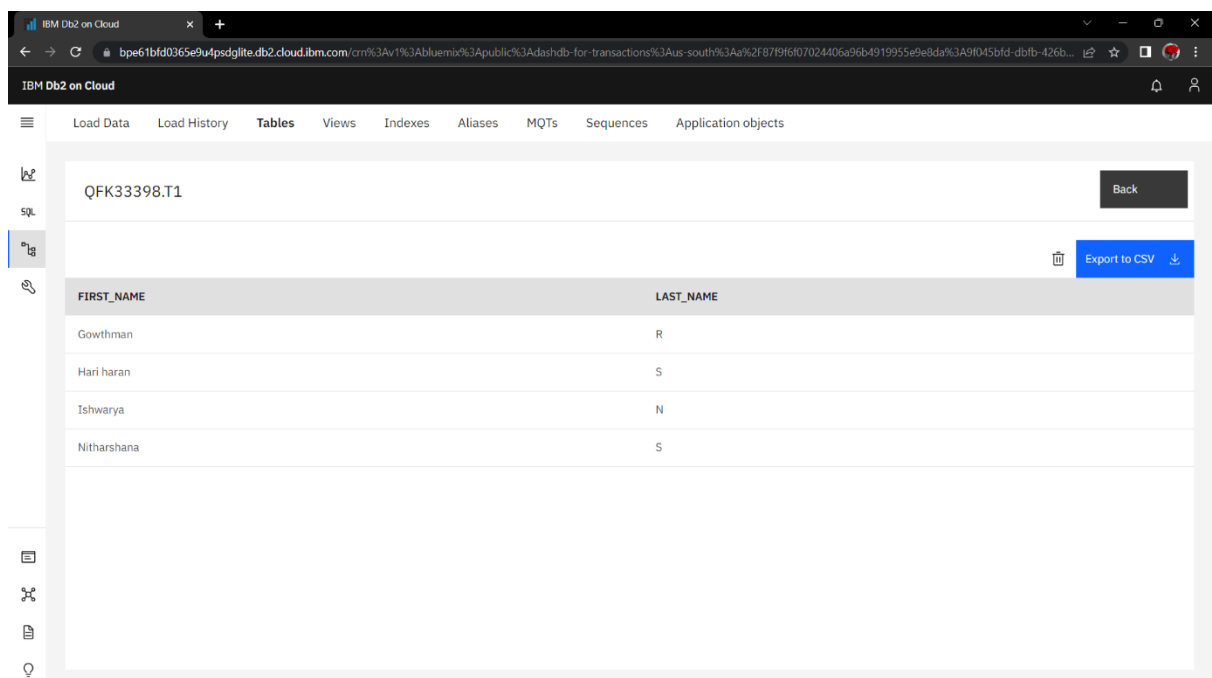


The screenshot shows the IBM Db2 on Cloud console interface. On the left, the 'Data objects' panel shows a table named 'QFK33398'. The main editor area displays a SQL script in a multi-tabbed interface with tabs for 'Untitled - 1', 'Untitled - 2', and 'Untitled - 3'. The script in 'Untitled - 3' is:

```
1 INSERT INTO T1(FIRST_NAME, LAST_NAME)
2 VALUES('Hari haran','S'),
3 ('Gowthman','R'),
4 ('Ishwarya','N'),
5 ('Nitharshana','S');
```

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

Script	Date	Status	Runtime
Untitled - 3	Sep 28, 2022 10:35:38 AM	✓ 1	0.016 s
INSERT INTO T1(FIRST_NAME, LAST_NAME) VALUES('Hari haran','S'), ('Gowthman','R'), ('Ishwarya','N'), ('Nitharshana','S');		✓	0.016 s



The screenshot shows the IBM Db2 on Cloud console interface, specifically the 'Tables' view. The table 'QFK33398.T1' is selected. The data is displayed in a table with two columns: 'FIRST\_NAME' and 'LAST\_NAME'.

FIRST_NAME	LAST_NAME
Gowthman	R
Hari haran	S
Ishwarya	N
Nitharshana	S

T2:

QUERY:

```
INSERT INTO T2(ID,NAME,AGE)
VALUES('1','Hari','21'),
('2','Gow','21'),
('3','Ishu','20'),
('4','Nithu','20');
```

The screenshot displays the IBM Db2 on Cloud web interface. The top section shows the SQL editor with the following query:

```
1 INSERT INTO T2(ID,NAME,AGE)
2 VALUES('1','Hari','21'),
3 ('2','Gow','21'),
4 ('3','Ishu','20'),
5 ('4','Nithu','20');
```

Below the editor is the 'History' tab, which lists the execution history of the query. The table below represents the data in the 'History' tab:

Script	Date	Status	Runtime
Untitled - 3	Sep 28, 2022 10:40:34 AM	✓ 1	0.010 s
INSERT INTO T2(ID,NAME,AGE) VALUES('1','Hari','21'), ('2','Gow','21'), ('3','Ishu','20'), ('4',...		✓	0.010 s
Untitled - 3	Sep 28, 2022 10:35:38 AM	✓ 1	0.016 s
INSERT INTO T1(FIRST_NAME, LAST_NAME) VALUES('Hari haran','S'), ('Gowthman','R'), ('Ishwariya','N...		✓	0.016 s

The bottom section of the interface shows the 'Tables' tab with the table 'QFK33398.T2'. The table structure is as follows:

ID	NAME	AGE
1	Hari	21
2	Gow	21
3	Ishu	20
4	Nithu	20

T3 :

QUERY :

```
INSERT INTO T3(NAME,CITY,PHONE_NO)
VALUES('Hari','ERODE','9360087076'),
('Gowthaman','TIRUPUR','9360087077'),
('Ishwarya','ANDHRA','9360087075'),
('Nitharshna','CHENNIMALAI','9360087072');
```

The screenshot shows the IBM Db2 on Cloud SQL editor interface. The query editor contains the following SQL statement:

```
1 INSERT INTO T3(NAME,CITY,PHONE_NO)
2 VALUES('Hari','ERODE','9360087076'),
3 ('Gowthaman','TIRUPUR','9360087077'),
4 ('Ishwarya','ANDHRA','9360087075'),
5 ('Nitharshna','CHENNIMALAI','9360087072');
```

The 'History' tab is active, displaying a table of executed queries:

Script	Date	Status	Runtime
Untitled - 3	Sep 28, 2022 10:49:43 AM	1	0.013 s
INSERT INTO T3(NAME,CITY,PHONE_NO) VALUES('Hari','ERODE','9360087076'), ('Gowthaman','TIRUPUR'...		1	0.013 s
Untitled - 3	Sep 28, 2022 10:46:20 AM	1	0.024 s
INSERT INTO T3(NAME,CITY,PHONE_NO) VALUES('Hari','ERODE','936076'), ('Gow','TIRUPUR','936077')...		1	0.024 s
Untitled - 3	Sep 28, 2022 10:45:40 AM	1	0.025 s

The screenshot shows the IBM Db2 on Cloud SQL editor interface displaying the result of the INSERT query. The 'Results' tab is active, showing a table with the following data:

NAME	CITY	PHONE_NO
Gowthaman	TIRUPUR	9360087077
Hari	ERODE	9360087076
Ishwarya	ANDHRA	9360087075
Nitharshna	CHENNIMALAI	9360087072

T4:

QUERY:

```
INSERT INTO T4(EMP_ID,EMP_NAME,GENDER)
VALUES('EMP00001','HARI','M'),
('EMP00000EMP00002','GOWTH','M'),
('EMP00003','ISHU','F'),
('EMP00004','NITHU','F');
```

The screenshot displays the IBM Db2 on Cloud web interface. The top navigation bar includes the IBM logo and various links. The main content area is divided into a left sidebar with navigation icons and a central workspace. The workspace shows a SQL script in a text editor, which has been executed. Below the editor, a 'History' tab is active, displaying a table of execution records.

Script	Date	Status	Runtime
Untitled - 3	Sep 28, 2022 10:54:36 AM	1	0.008 s
INSERT INTO T4(EMP_ID,EMP_NAME,GENDER) VALUES('EMP00001','HARI','M'), ('EMP00000EMP00002','GOWT...		1	0.008 s
Untitled - 3	Sep 28, 2022 10:54:18 AM	1	0.038 s
INSERT INTO T3(EMP_ID,EMP_NAME,GENDER) VALUES('EMP00001','HARI','M'), ('EMP00000EMP00002','GOWT...		1	0.038 s
Untitled - 3	Sep 28, 2022 10:53:42 AM	1	0.014 s

QFK33398.T4

EMP_ID	EMP_NAME	GENDER
EMP00001	HARI	M
EMP00003	ISHU	F
EMP00004	NITHU	F
EMP0000EMP00002	GOWTH	M

T5:

QUERY :

```
INSERT INTO T5(NAME,CITY,PIN_CODE)
VALUES('Hari','ERODE','001'),
('Gowthaman','TIRUPUR','002'),
('Ishwarya','ANDHRA','003'),
('Nitharshna','CHENNIMALAI','004');
```

SQL

```
1 INSERT INTO T5(NAME,CITY,PIN_CODE)
2 VALUES('Hari','ERODE','001'),
3 ('Gowthaman','TIRUPUR','002'),
4 ('Ishwarya','ANDHRA','003'),
5 ('Nitharshna','CHENNIMALAI','004');
6
```

Script	Date	Status	Runtime
Untitled - 3	Sep 28, 2022 10:59:02 AM	1	0.008 s
INSERT INTO T5(NAME,CITY,PIN_CODE) VALUES('Hari','ERODE','001'), ('Gowthaman','TIRUPUR','002')...		1	0.008 s
Untitled - 3	Sep 28, 2022 10:56:31 AM	1	0.026 s
INSERT INTO T5(NAME,CITY,PIN_CODE) VALUES('Hari','ERODE','001'), ('Gowthaman','TIRUPUR','002')...		1	0.026 s
Untitled - 3	Sep 28, 2022 10:54:36 AM	1	0.008 s

IBM Db2 on Cloud

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bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/crm%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-south%3Aa%2F87f9f6f07024406a96b4919955e9e8da%3A9f045bfd-dbf-426b...

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IBM Db2 on Cloud

☰

Load DataLoad History**Tables**ViewsIndexesAliasesMQTsSequencesApplication objects

🔍

SQL

🔍

📄

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QFK33398.T5

Back

🗑️

Export to CSV

⬇️

NAME	CITY	PIN_CODE
Gowthaman	TIRUPUR	2
Hari	ERODE	1
Ishwarya	ANDHRA	3
Nitharshna	CHENNIMALAI	4

## 2.PERFORM UPDATE , DELETE QUERIES in 5 tables:

T1 :

QUERY :

DELETE FROM T1 WHERE LAST\_NAME='N';

UPDATE T1 SET FIRST\_NAME='HARISH' WHERE LAST\_NAME='S'

The screenshot shows the IBM Db2 on Cloud console interface. The SQL editor contains the query: `1 DELETE FROM T1 WHERE LAST_NAME='N';`. The 'History' tab is active, displaying a table of executed scripts.

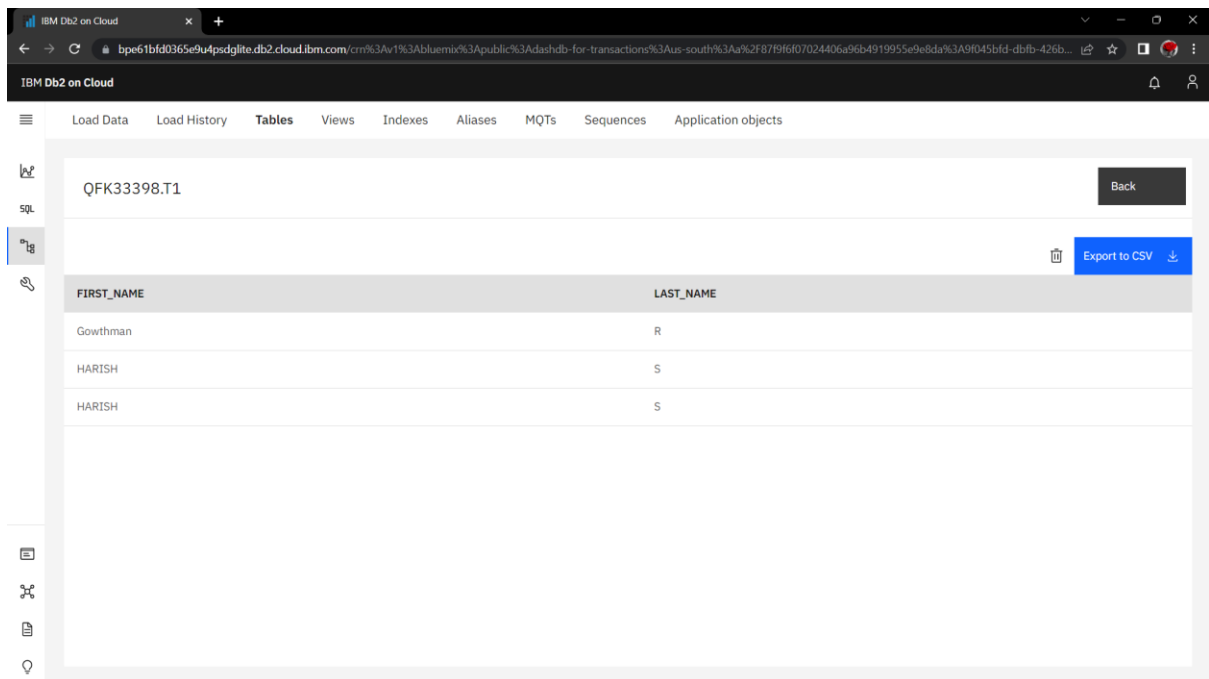
Script	Date	Status	Runtime
Untitled - 3	Sep 28, 2022 11:10:45 AM	1	0.004 s
DELETE FROM T1 WHERE LAST_NAME='N'			0.004 s
Untitled - 3	Sep 28, 2022 11:10:31 AM	1	0.014 s
INSERT INTO T1(FIRST_NAME, LAST_NAME) VALUES('Ishwarya', 'N')			0.014 s
Untitled - 3	Sep 28, 2022 11:09:23 AM	1	0.003 s

The screenshot shows the IBM Db2 on Cloud console interface. The SQL editor contains the query: `1 UPDATE T1 SET FIRST_NAME='HARISH' WHERE LAST_NAME='S';`. The 'History' tab is active, displaying a table of executed scripts.

Script	Date	Status	Runtime
Untitled - 3	Sep 28, 2022 11:12:48 AM	1	0.014 s
UPDATE T1 SET FIRST_NAME='HARISH' WHERE LAST_NAME='S'			0.014 s
Untitled - 3	Sep 28, 2022 11:10:45 AM	1	0.004 s
DELETE FROM T1 WHERE LAST_NAME='N'			0.004 s
Untitled - 3	Sep 28, 2022 11:10:31 AM	1	0.014 s



## AFTER DELETING AND UPDATING IN T1:



QFK33398.T1

Back

Export to CSV

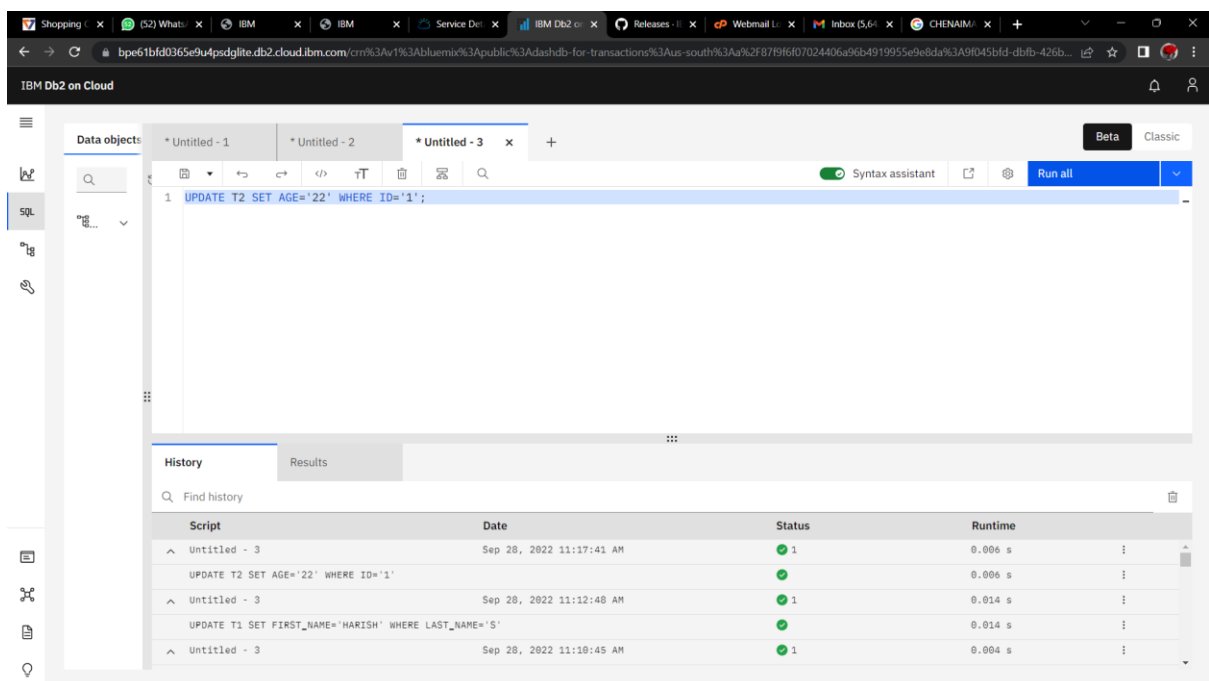
FIRST_NAME	LAST_NAME
Gowthman	R
HARISH	S
HARISH	S

T2 :

### QUERY:

UPDATE T2 SET AGE='22' WHERE ID='1';

DELETE FROM T2 WHERE ID='4';



History

Find history

Script	Date	Status	Runtime
Untitled - 3	Sep 28, 2022 11:17:41 AM	1	0.006 s
UPDATE T2 SET AGE='22' WHERE ID='1'			0.006 s
Untitled - 3	Sep 28, 2022 11:12:48 AM	1	0.014 s
UPDATE T1 SET FIRST_NAME='HARISH' WHERE LAST_NAME='S'			0.014 s
Untitled - 3	Sep 28, 2022 11:10:45 AM	1	0.004 s

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bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/crm%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-south%3Aa%2F87f9f6f07024406a96b4919955e9e8da%3A9f045bfd-dbf-426b...

IBM Db2 on Cloud

Data objects \*Untitled - 1 \*Untitled - 2 \*Untitled - 3 x + Beta Classic

SQL

```
1 DELETE FROM T2 WHERE ID='4';
```

History Results

Find history

Script	Date	Status	Runtime
Untitled - 3	Sep 28, 2022 11:20:23 AM	✓ 1	0.017 s
DELETE FROM T2 WHERE ID='4'		✓	0.017 s
Untitled - 3	Sep 28, 2022 11:17:41 AM	✓ 1	0.006 s
UPDATE T2 SET AGE='22' WHERE ID='1'		✓	0.006 s
Untitled - 3	Sep 28, 2022 11:12:48 AM	✓ 1	0.014 s

### AFTER DELETING AND UPDATING IN T2:

IBM Db2 on Cloud x +

Reload this page

IBM Db2 on Cloud

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

QFK33398.T2 Back

Export to CSV

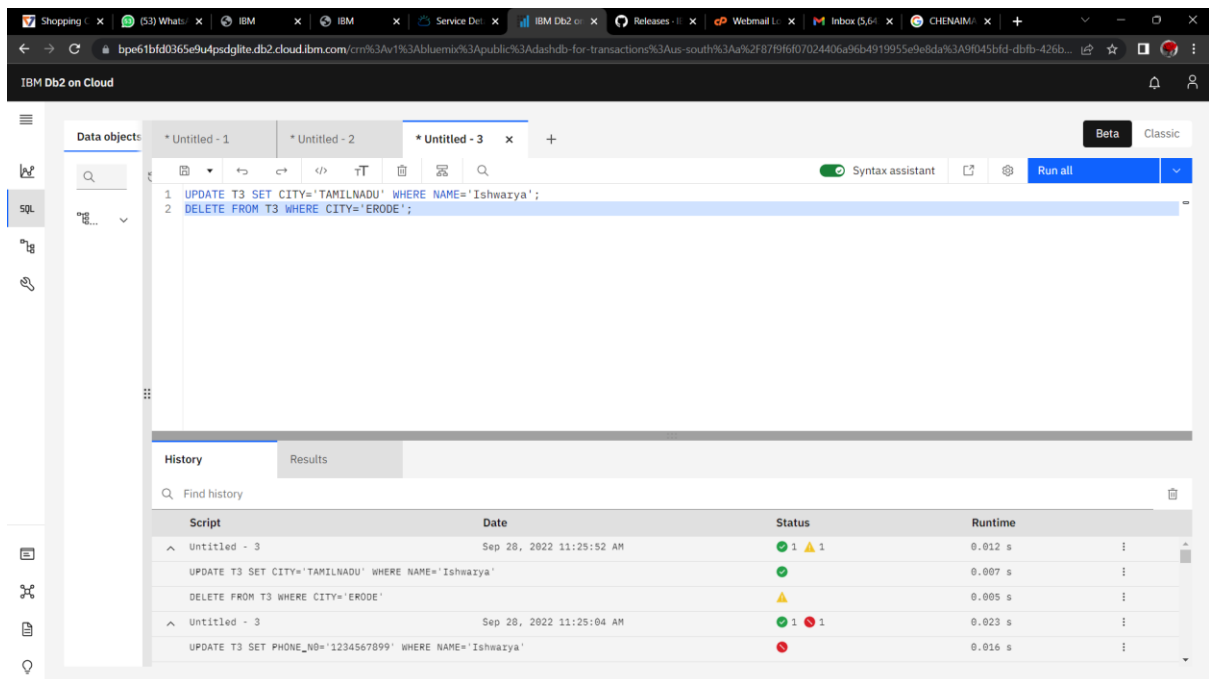
ID	NAME	AGE
1	Hari	22
2	Gow	21
3	Ishu	20

T3 :

QUERY:

UPDATE T3 SET CITY='TAMILNADU' WHERE NAME='Ishwarya';

DELETE FROM T3 WHERE CITY='ERODE';

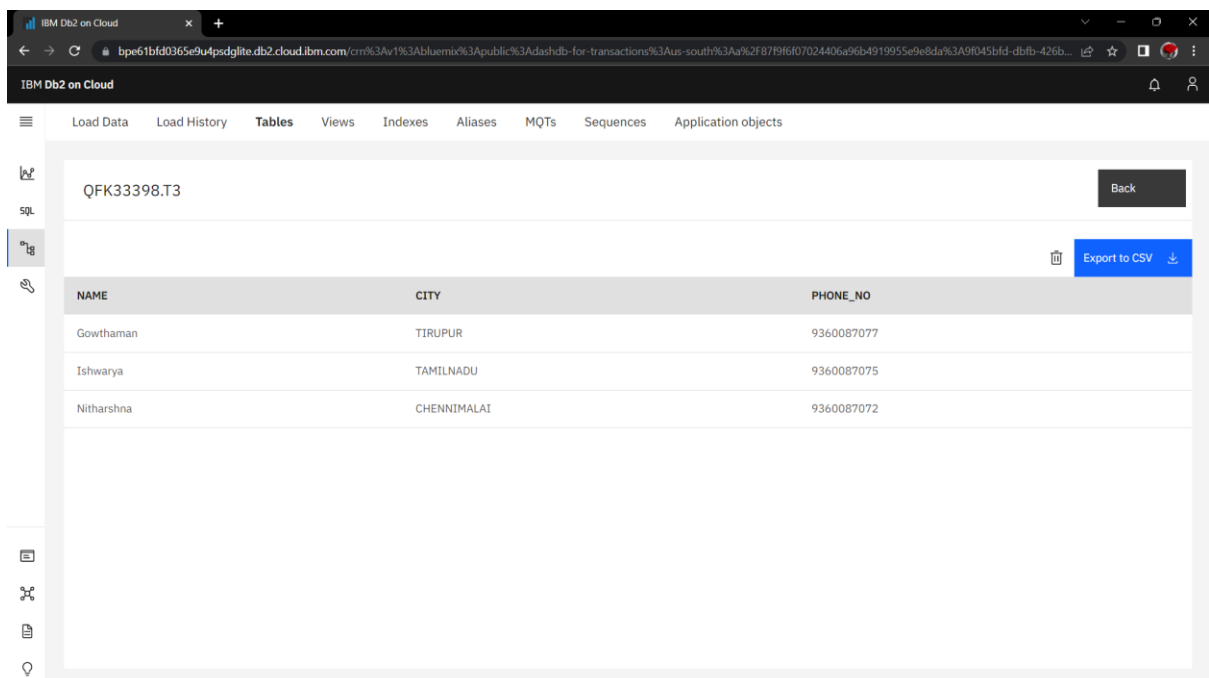


The screenshot shows the IBM Db2 on Cloud SQL editor interface. The SQL editor contains the following script:

```
1 UPDATE T3 SET CITY='TAMILNADU' WHERE NAME='Ishwarya';
2 DELETE FROM T3 WHERE CITY='ERODE';
```

The History tab displays the execution history of the script:

Script	Date	Status	Runtime
Untitled - 3	Sep 28, 2022 11:25:52 AM	1 1	0.012 s
UPDATE T3 SET CITY='TAMILNADU' WHERE NAME='Ishwarya'		1	0.007 s
DELETE FROM T3 WHERE CITY='ERODE'		1	0.005 s
Untitled - 3	Sep 28, 2022 11:25:04 AM	1 1	0.023 s
UPDATE T3 SET PHONE_NO='1234567899' WHERE NAME='Ishwarya'		1	0.016 s



The screenshot shows the IBM Db2 on Cloud Tables view for the table T3. The table has three columns: NAME, CITY, and PHONE\_NO. The data rows are:

NAME	CITY	PHONE_NO
Gowthaman	TIRUPUR	9360087077
Ishwarya	TAMILNADU	9360087075
Nitharshna	CHENNIMALAI	9360087072

T4:

QUERY :

UPDATE T4 SET EMP\_ID='EMP00002' WHERE EMP\_NAME='GOWTH';

DELETE FROM T4 WHERE EMP\_NAME='NITHU';

The screenshot shows the IBM Db2 on Cloud SQL editor interface. The top bar includes the IBM logo and the text "IBM Db2 on Cloud". The main area displays a SQL query editor with two lines of code: `1 UPDATE T4 SET EMP_ID='EMP00002' WHERE EMP_NAME='GOWTH';` and `2 DELETE FROM T4 WHERE EMP_NAME='NITHU';`. Below the editor, there is a "History" tab showing a table of executed queries. The table has columns for "Script", "Date", "Status", and "Runtime".

Script	Date	Status	Runtime
Untitled - 3	Sep 28, 2022 11:29:20 AM	1 1	0.012 s
UPDATE T4 SET EMP_ID='EMP00002' WHERE EMP_NAME='GOWTH'			0.007 s
DELETE FROM T4 WHERE EMP_NAME='NITHU'			0.005 s
Untitled - 3	Sep 28, 2022 11:28:55 AM	1 1	0.029 s
UPDATE T4 SET EMP_ID='EMP00002' WHERE NAME='GOWTH'			0.021 s

The screenshot shows the IBM Db2 on Cloud Tables view for table T4. The top bar includes the IBM logo and the text "IBM Db2 on Cloud". The main area displays a table with three columns: "EMP\_ID", "EMP\_NAME", and "GENDER". The table contains three rows of data.

EMP_ID	EMP_NAME	GENDER
EMP00001	HARI	M
EMP00002	GOWTH	M
EMP00003	ISHU	F

T5:

QUERY:

UPDATE T5 SET NAME='HARI HARAN' WHERE CITY='ERODE';

DELETE FROM T5 WHERE PIN\_CODE='3';

IBM Db2 on Cloud

SQL

```
1 UPDATE T5 SET NAME='HARI HARAN' WHERE CITY='ERODE';
2 DELETE FROM T5 WHERE PIN_CODE='3';
```

History

Script	Date	Status	Runtime
Untitled - 3	Sep 28, 2022 11:31:56 AM	2	0.019 s
UPDATE T5 SET NAME='HARI HARAN' WHERE CITY='ERODE'		✓	0.011 s
DELETE FROM T5 WHERE PIN_CODE='3'		✓	0.008 s
Untitled - 3	Sep 28, 2022 11:29:28 AM	1	0.012 s
UPDATE T4 SET EMP_ID='EMP00002' WHERE EMP_NAME='GOWTH'		✓	0.007 s

IBM Db2 on Cloud

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

QFK33398.T5

Export to CSV

NAME	CITY	PIN_CODE
Gowthaman	TIRUPUR	2
HARI HARAN	ERODE	1
Nitharshna	CHENNIMALAI	4

### 3.LOAD EXCEL COMMA SEPERATED FILE TO db2

The screenshot shows the 'Load Data' job completion screen in IBM Db2 on Cloud. A notification banner at the top right states: 'The data load job succeeded. Load class-list (2022-05-11).csv from My Computer to QFK33398.DEMO. 2022/09/28, 11:41 AM View details'. The main section, 'Load details', shows a 'COMPLETE' status with a blue checkmark. Below this, a donut chart displays the job statistics: 9 Rows read, 9 Rows loaded, and 0 Rows rejected. The text 'The data load job succeeded. You can now work with your data.' is prominently displayed. The 'Status' tab is active, showing the start time (09/28/2022 11:41:16 AM) and end time (09/28/2022 11:41:51 AM). The 'Errors' and 'Warnings' sections are empty, indicating no errors or warnings occurred.

Rows read	Rows loaded	Rows rejected
9	9	0

Start time: 09/28/2022 11:41:16 AM  
End time: 09/28/2022 11:41:51 AM

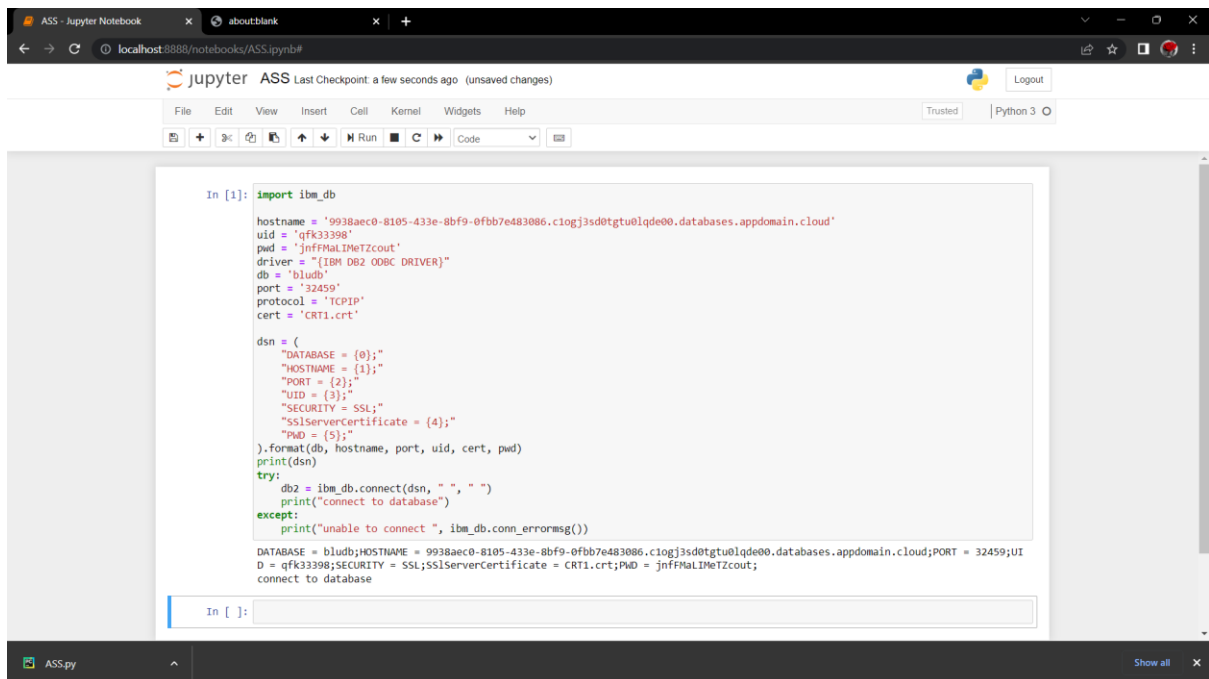
The screenshot shows the 'Tables' view in IBM Db2 on Cloud. The 'Schemas' list on the left shows the 'QFK33398' schema with 9 tables. The 'Tables' list on the right shows the loaded tables, with the 'DEMO' table highlighted by a red box. The 'DEMO' table is a User type table. The 'Total: 1, selected: 1' is shown at the bottom of the Schemas list, and 'Total: 9, selected: 0' is shown at the bottom of the Tables list.

Name	Type	Tables
QFK33398	User	9

Name	Schema	Properties
ASSIGNMENT2	QFK33398	...
DEMO	QFK33398	...
T1	QFK33398	...
T2	QFK33398	...
T3	QFK33398	...
T4	QFK33398	...
T5	QFK33398	...
TEST	QFK33398	...
USER	QFK33398	...



#### 4.CONNECT PYTHON TO db2:



The screenshot shows a Jupyter Notebook in a web browser. The notebook contains a single code cell with the following Python code:

```
In [1]: import ibm_db

hostname = '9938aec0-8105-433e-8bf9-0fbb7e483086.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud'
uid = 'qfk33398'
pwd = 'jnfFMaLIMeTZcout'
driver = "{IBM DB2 ODBC DRIVER}"
db = 'bludb'
port = '32459'
protocol = 'TCPIP'
cert = 'CRT1.crt'

dsn = (
    "DATABASE = {0};"
    "HOSTNAME = {1};"
    "PORT = {2};"
    "UID = {3};"
    "SECURITY = SSL;"
    "SSLServerCertificate = {4};"
    "PWD = {5};"
).format(db, hostname, port, uid, cert, pwd)
print(dsn)
try:
    db2 = ibm_db.connect(dsn, " ", " ")
    print("connect to database")
except:
    print("unable to connect ", ibm_db.conn_errormsg())
```

Below the code cell, the output of the code is displayed:

```
DATABASE = bludb;HOSTNAME = 9938aec0-8105-433e-8bf9-0fbb7e483086.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT = 32459;UID = qfk33398;SECURITY = SSL;SSLServerCertificate = CRT1.crt;PWD = jnfFMaLIMeTZcout;
connect to database
```

#### CODE :

```
import ibm_db
```

```
hostname = '9938aec0-8105-433e-8bf9-0fbb7e483086.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud'
```

```
uid = 'qfk33398'
```

```
pwd = 'jnfFMaLIMeTZcout'
```

```
driver = "{IBM DB2 ODBC DRIVER}"
```

```
db = 'bludb'
```

```
port = '32459'
```

```
protocol = 'TCPIP'
```

```
cert = 'CRT1.crt'
```

```
dsn = (
```

```
    "DATABASE = {0};"
```

```
    "HOSTNAME = {1};"
```

```
    "PORT = {2};"
```

```
    "UID = {3};"
```



```
"SECURITY = SSL;"

"SSIServerCertificate = {4};"

"PWD = {5};"

).format(db, hostname, port, uid, cert, pwd)

print(dsn)

try:

    db2 = ibm_db.connect(dsn, " ", " ")

    print("connect to database")

except:

    print("unable to connect ", ibm_db.conn_errormsg())
```