

# ASSIGNMENT - 2

**TEAM ID** : PNT2022TMID19417

**PROJECT NAME** : PLASMA DONOR APPLICATION

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

TABLE NAMES : EMPLOYEE ,STAFF,STUDENT,CUSTOMER ,BAND

### EMPLOYEE

#### QUERY :

INSERT INTO EMPLOYEE

VALUES(31,'RITHIGA',50000),

(51,'KALAIYARASI',30000),

(61,'SRIMATHI',20000),

(33,'LAVANYA',10000),

(37,'RAHUL',7000),

(39,'MADHAN',80000),

(45,'RAM',90000);

#### OUTPUT :

The screenshot displays the IBM Db2 on Cloud web interface. The browser address bar shows the URL: `https://bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/crm%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-south%3Aa%2F77940c7102984175ac7714ed1a53fa3e%3A2406d1ba-1c...`. The interface includes a sidebar with navigation icons for Data objects, My script, and SQL. The main area shows a script editor with the following SQL query:

```
1 INSERT INTO EMPLOYEE
2 VALUES(31,'RITHIGA',50000),
3 (51,'KALAIYARASI',30000),
4 (61,'SRIMATHI',20000),
5 (33,'LAVANYA',10000),
6 (37,'RAHUL',7000),
7 (39,'MADHAN',80000),
8 (45,'RAM',90000);
```

Below the script editor, the History tab is active, displaying a table of execution results:

Script	Date	Status	Runtime
Untitled - 1	Sep 28, 2022 11:40:19 AM	1	0.009 s
INSERT INTO EMPLOYEE VALUES(31,'RITHIGA',50000), (51,'KALAIYARASI',30000), (61,'SRIMATHI',20000), (33,'LAVANYA',10000), (37,'RAHUL',7000), (39,'MADHAN',80000), (45,'RAM',90000);			

The bottom of the screen shows a Windows taskbar with the date and time: 11:43 AM, 28/9/2022.

Registration successful - gokula | IBM Cloud Free Tier | IBM | Service Details - IBM Cloud | IBM Db2 on Cloud

IBM Db2 on Cloud

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

YCJ91837.EMPLOYEE

Export to CSV

EMPID	EMPNAME	SALARY
31	RITHIGA	50000
33	LAVANYA	10000
37	RAHUL	7000
39	MADHAN	80000
45	RAM	90000
51	KALAIYARASI	30000
61	SRIMATHI	20000

30°C Cloudy 11:43 AM 28/9/2022

## STAFF

### QUERY :

INSERT INTO STAFF

VALUES(1,'KAVITHA','TAMIL'),(2,'KALAI','ENGLISH'),

(3,'VARSHAN','MATHS'),(4,'LATHA','SCIENCE'),

(5,'RADHA','SOCIAL'),(6,'MANI','PHYSICS'),(7,'RINDHYA','CS');

### OUTPUT :

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IBM Db2 on Cloud

Data objects My script

Filter objects

YCJ91837

Untitled - 1 Untitled - 2 **Untitled - 3**

Syntax assistant Run all

```

1 INSERT INTO STAFF
2 VALUES(1,'KAVITHA','TAMIL'),
3 (2,'KALAI','ENGLISH'),
4 (3,'VARSHAN','MATHS'),
5 (4,'LATHA','SCIENCE'),
6 (5,'RADHA','SOCIAL'),
7 (6,'MANI','PHYSICS'),
8 (7,'RINDHYA','CS');
```

History

Find history

Script	Date	Status	Runtime
Untitled - 3	Sep 28, 2022 12:10:31 PM	1	0.010 s
INSERT INTO STAFF VALUES(1,'KAVITHA','TAMIL'), (2,'KALAI','ENGLISH'), (3,'VA...			0.010 s

30°C Cloudy 12:11 PM 28/9/2022

STAFFID	NAME	SUBJECT
1	KAVITHA	TAMIL
2	KALAI	ENGLISH
3	VARSHAN	MATHS
4	LATHA	SCIENCE
5	RADHA	SOCIAL
6	MANI	PHYSICS
7	RINDHYA	CS

## STUDENT

### QUERY:

INSERT INTO STUDENT

VALUES(1,'RITHISH',50),(2,'KALAIYARASAN',30),(3,'SRIVARSHAN',60),(4,'LATHIKA',100),  
(5,'RATHI',70),(6,'MANOJ',80),(7,'RAMYA',90);

### OUTPUT:

Script	Date	Status	Runtime
Untitled - 2	Sep 28, 2022 12:07:52 PM	1	0.009 s
INSERT INTO STUDENT VALUES(1, 'RITHISH', 50), (2, 'KALAIYARASAN', 30), (3, 'SRIVARSHAN', 60), (4, 'LATHIKA', 100), (5, 'RATHI', 70), (6, 'MANOJ', 80), (7, 'RAMYA', 90);	Sep 28, 2022 11:58:59 AM	1	0.004 s

ROLLNO	NAME	MARK
1	RITHISH	50
2	KALAIYARASAN	30
3	SRIVARSHAN	60
4	LATHIKA	100
5	RATHI	70
6	MANOJ	80
7	RAMYA	90

## CUSTOMER

### QUERY :

INSERT INTO CUSTOMER

```
VALUES(1,'KAVITHA','AMAZON','CASH'),
(2,'KALAI','MEESHO','ONLINE_PAYMENT'),
(3,'VARSHAN','FLIPKART','CASH'),
(4,'LATHA','AMAZON','CASH'),
(5,'RADHA','FLIPKATR','ONLINE_PAYMENT'),
(6,'MANI','MEESHO','CASH'),
(6,'MANI','MEESHO','CASH'),
(7,'RINDHYA','AMAZON','ONLINE_PAYMENT');
```

### OUTPUT :

Registration successful - gokula: x IBM Cloud Free Tier | IBM x IBM x 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%2F77940c7102984175ac7714ed1a53fa3e%3A2406d1ba-1c... Error

### IBM Db2 on Cloud

Data objectsMy script

Filter objects

YCJ91837

1 INSERT INTO CUSTOMER

2 VALUES(1,'KAVITHA','AMAZON','CASH'),

3 (2,'KALAI','MEESHO','ONLINE\_PAYMENT'),

4 (3,'VARSHAN','FLIPKART','CASH'),

5 (4,'LATHA','AMAZON','CASH'),

6 (5,'RADHA','FLIPKATR','ONLINE\_PAYMENT'),

7 (6,'MANI','MEESHO','CASH'),

8 (6,'MANI','MEESHO','CASH'),

9 (7,'RINDHYA','AMAZON','ONLINE\_PAYMENT');

History

Find history

Script	Date	Status	Runtime
Untitled - 4	Sep 28, 2022 12:23:57 PM	1	0.010 s
INSERT INTO CUSTOMER VALUES(1,'KAVITHA','AMAZON','CASH'), (2,'KALAI','MEESHO...			0.010 s

30°C Cloudy

Registration successful - gokula: x IBM Cloud Free Tier | IBM x IBM x 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%2F77940c7102984175ac7714ed1a53fa3e%3A2406d1ba-1c... Error

### IBM Db2 on Cloud

Load DataLoad HistoryTablesViewsIndexesAliasesMQTsSequencesApplication objects

YCJ91837.CUSTOMERBack

Export to CSV

ORDERID	NAME	PLATFORM	MODE
1	KAVITHA	AMAZON	CASH
2	KALAI	MEESHO	ONLINE_PAYMENT
3	VARSHAN	FLIPKART	CASH
4	LATHA	AMAZON	CASH
5	RADHA	FLIPKATR	ONLINE_PAYMENT
6	MANI	MEESHO	CASH
6	MANI	MEESHO	CASH
7	RINDHYA	AMAZON	ONLINE_PAYMENT

30°C Cloudy

## BAND

### QUERY :

INSERT INTO BAND

VALUES(1,'BTS',7),

(2,'EXO',5),

(3,'BLACKPINK',4),

(4,'TXT',6),

(5,'SELENA',1),

(6,'TAYLOR',1),

(7,'ONE\_DIRECTION',5);

### OUTPUT :

The screenshot displays the IBM Db2 on Cloud web interface. The left sidebar shows the 'Data objects' tab with a search bar and a list of objects, including 'YC391837'. The main area shows a script editor with the following SQL query:

```
1 INSERT INTO BAND
2 VALUES(1,'BTS',7),
3 (2,'EXO',5),
4 (3,'BLACKPINK',4),
5 (4,'TXT',6),
6 (5,'SELENA',1),
7 (6,'TAYLOR',1),
8 (7,'ONE_DIRECTION',5);
```

Below the script editor, the 'History' tab is active, showing a table of executed scripts:

Script	Date	Status	Runtime
Untitled - 5	Sep 28, 2022 12:29:37 PM	1	0.013 s
INSERT INTO BAND VALUES(1,'BTS',7), (2,'EXO',5), (3,'BLACKPINK',4), (4,'TXT',6), (5,'SELENA',1), (6,'TAYLOR',1), (7,'ONE_DIRECTION',5);		✓	0.013 s

The bottom of the screen shows a Windows taskbar with various application icons and a system tray indicating 30°C Cloudy, 12:30 PM, and 28/9/2022.

ID	NAME	COUNT
1	BTS	7
2	EXO	5
3	BLACKPINK	4
4	TXT	6
5	SELENA	1
6	TAYLOR	1
7	ONE_DIRECTION	5

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

### EMPLOYEE QUERY :

UPDATE EMPLOYEE

SET EMPNAME='RAJ' WHERE EMPID=37;

DELETE FROM EMPLOYEE

WHERE EMPNAME='RAM';

### OUTPUT:

Script	Date	Status	Runtime
Untitled - 1	Sep 28, 2022 12:40:35 PM	3	0.029 s
INSERT INTO EMPLOYEE VALUES(31,'RITHIGA',50000), (51,'KALAIYARASI',30000), (61,'SRINATHI',20000), (33,'LAVANYA',10000), (37,'RAHUL',7000), (39,'MADHAN',80000), (45,'RAM',90000);		✓	0.011 s
UPDATE EMPLOYEE SET EMPNAME='RAJ' WHERE EMPID=37;		✓	0.010 s
DELETE FROM EMPLOYEE WHERE EMPNAME='RAM';		✓	0.008 s

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

YCJ91837.EMPLOYEE Back

Export to CSV

EMPID	EMPNAME	SALARY
31	RITHIGA	50000
33	LAVANYA	10000
37	RAJ	7000
39	MADHAN	80000
51	KALAIYARASI	30000
61	SRIMATHI	20000

30°C Cloudy 12:42 PM 28/9/2022

## STAFF QUERY :

UPDATE STAFF

SET NAME='RAJ'

WHERE STAFFID=4;

DELETE FROM STAFF

WHERE NAME ='RADHA';

## OUTPUT :

(1) WhatsApp | Service Details - IBM Cloud | IBM Db2 on Cloud

Filter objects

YCJ91837

Tables

BAND

CUSTOMER

DEMO3

EMPLOYEE

STAFF

STUDENT

Views

MQTs

Aliases

Nicknames

**\* staff**

```

1 INSERT INTO STAFF
2 VALUES(1,'KAVITHA','TAMIL'),(2,'KALAI','ENGLISH'),
3 (3,'VARSHAN','MATHS'),(4,'LATHA','SCIENCE'),
4 (5,'RADHA','SOCIAL'),(6,'MANI','PHYSICS'),(7,'RINDHYA','CS');
5
6 UPDATE STAFF
7 SET NAME='RAJ'
8 WHERE STAFFID=4;
9 DELETE FROM STAFF
10 WHERE NAME ='RADHA';
11

```

Run all

History

Find history

Script	Date	Status	Runtime
staff	Sep 28, 2022 8:42:40 PM	✓ 3	0.025 s
INSERT INTO STAFF VALUES(1,'KAVITHA','TAMIL'),(2,'KALAI','ENGLISH'), (3,'VAR...		✓	0.011 s
UPDATE STAFF SET NAME='RAJ' WHERE STAFFID=4		✓	0.008 s
DELETE FROM STAFF WHERE NAME ='RADHA'		✓	0.006 s

Screenshot (5).png | Screenshot (4).png | Screenshot (3).png | Screenshot (2).png | Screenshot (1).png | ASS-2 (4).docx

20:42 28-09-2022



STAFFID	NAME	SUBJECT
1	KAVITHA	TAMIL
2	KALAI	ENGLISH
3	VARSHAN	MATHS
4	RAJ	SCIENCE
6	MANI	PHYSICS
7	RINDHYA	CS

**STUDENT QUERY :**

UPDATE STUDENT

SET NAME='RAKESH'

WHERE MARK=70;

DELETE FROM STUDENT

WHERE ROLLNO=7;

**OUTPUT :**

Script	Date	Status	Runtime
STUDENT	Sep 28, 2022 8:57:06 PM	✓ 3	0.031 s
INSERT INTO STUDENT VALUES(1, 'RITHISH', 50), (2, 'KALAIYARASAN', 30), (3, 'SRIVARSHAN', 60), (4, 'LATHIKA', 100), (5, 'RATHI', 70), (6, 'MANOJ', 80), (7, 'RAMYA', 90);		✓	0.015 s
UPDATE STUDENT SET NAME='RAKESH' WHERE MARK=70;		✓	0.008 s
DELETE FROM STUDENT WHERE ROLLNO=7;		✓	0.008 s
staff	Sep 28, 2022 8:44:38 PM	✓ 3	0.027 s

ROLLNO	NAME	MARK
1	RITHISH	50
2	KALAIYARASAN	30
3	SRIVARSHAN	60
4	LATHIKA	100
5	RAKESH	70
6	MANOJ	80

## CUSTOMER QUERY:

UPDATE CUSTOMER

SET MODE='CASH'

WHERE NAME='RINDHYA';

DELETE FROM CUSTOMER

WHERE ORDERID=6;

## OUTPUT:

Script	Date	Status	Runtime
CUSTOMER	Sep 28, 2022 9:12:00 PM	✓ 3	0.024 s
INSERT INTO CUSTOMER VALUES(1, 'KAVITHA', 'AMAZON', 'CASH'), (2, 'KALAI', 'MEESHO', 'ONLINE_PAYMENT'), (3, 'VARSHAN', 'FLIPKART', 'CASH'), (4, 'LATHA', 'AMAZON', 'CASH'), (5, 'RADHA', 'FLIPKART', 'ONLINE_PAYMENT'), (6, 'MANI', 'MEESHO', 'CASH'), (7, 'RINDHYA', 'AMAZON', 'ONLINE_PAYMENT');		✓	0.010 s
UPDATE CUSTOMER SET MODE='CASH' WHERE NAME='RINDHYA';		✓	0.008 s

ORDERID	NAME	PLATFORM	MODE
1	KAVITHA	AMAZON	CASH
2	KALAI	MEESHO	ONLINE_PAYMENT
3	VARSHAN	FLIPKART	CASH
4	LATHA	AMAZON	CASH
5	RADHA	FLIPKART	ONLINE_PAYMENT
7	RINDHYA	AMAZON	CASH

## BAND QUERY :

UPDATE STUDENT

SET NAME='RAKESH'

WHERE MARK=70;

DELETE FROM STUDENT

WHERE ROLLNO=7;

## OUTPUT :

Script	Date	Status	Runtime
BAND	Sep 28, 2022 9:20:57 PM	✓ 3	0.031 s
INSERT INTO BAND VALUES(1,'BTS',7), (2,'EXO',5), (3,'BLACKPINK',4), (4,'TXT',6), (5,'SELENA',1), (6,'TAYLOR',1), (7,'ONE_DIRECTION',5);		✓	0.017 s
UPDATE BAND SET NAME='ONE' WHERE ID=7		✓	0.007 s

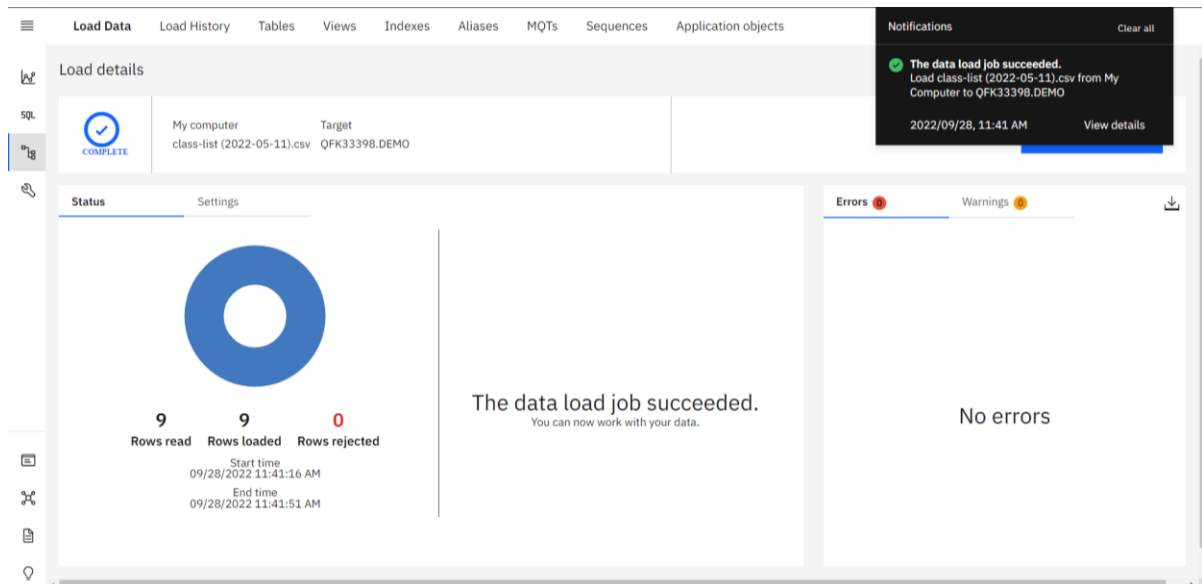
YJC91837.BAND

Back

Export to CSV

ID	NAME	COUNT
1	BTS	7
2	EXO	5
3	BLACKPINK	4
4	TXT	6
7	ONE	5

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



Service Details - IBM Cloud | IBM Db2 on Cloud | excelcsv - Google Sheets

bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-south%3Aa%2F77940c7102984175ac7714ed1a53fa3e%3A2406d1ba-1c39-4f3...

### IBM Db2 on Cloud

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

Source | Target | Define | Finalize

You are loading the file **DEMO3.csv** into **YCJ91837.DEMO3**

Code page (character encoding): 1208 (UTF-8) | Separator: , | Header in first row: ☒ | Time & date format: | Detect data types: ☐

ATTENDANCE_FOR_	CLASS_LIST	COLUMN_2	COLUMN_3	COLUMN_4	COLUMN_5
VARCHAR(25)	VARCHAR(28)	VARCHAR(5)	VARCHAR(8)	VARCHAR(12)	VARCHAR(12)
1 Date:	4/3/2022	Time:	11:26	Meet ID:	uez-gzfw-c
2					
3 Names	4/3/2022	Email	Comments	Arrival time	Last Seen
4 19cs031				11:28	11:54
5 19cs045				11:30	11:54
6 19cs106				11:30	11:54
7 19cs058				11:30	11:54
8 19cs001				11:30	11:54
9 Peter				11:30	11:54
10 Carn				11:28	11:51

Back | Next

load\_16625127128...txt | class-list (2022-03-...).csv | Show all

36°C Mostly sunny | 1:57 PM 28/9/2022

Service Details - IBM Cloud | IBM Db2 on Cloud | excelcsv - Google Sheets

bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-south%3Aa%2F77940c7102984175ac7714ed1a53fa3e%3A2406d1ba-1c39-4f3...

### IBM Db2 on Cloud

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

YCJ91837.DEMO3

Back

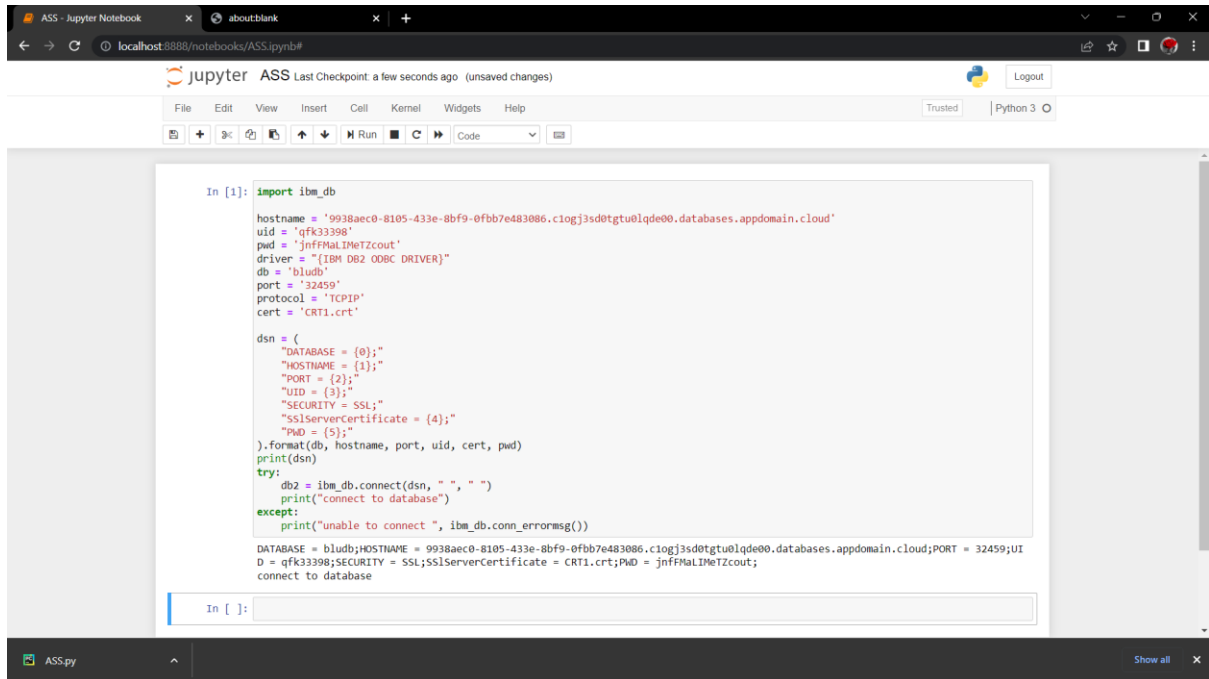
Export to CSV

ATTENDANCE_FOR_	CLASS_LIST	COLUMN_2	COLUMN_3	COLUMN_4	COLUMN_5	COLUMN_6	COLUMN_7	COLUMN_8
19cs001				11:30	11:54	25	1	
19cs031				11:28	11:54	27	1	
19cs045				11:30	11:54	25	1	
19cs058				11:30	11:54	25	1	
19cs106				11:30	11:54	25	1	
Carp				11:28	11:51	24	1	
Date:	4/3/2022	Time:	11:26	Meet ID:	uez-gzfw-cro			

load\_16625127128...txt | class-list (2022-03-...).csv | Show all

36°C Mostly sunny | 1:58 PM 28/9/2022

#### 4. CONNECT PYTHON TO db2.



```
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 = {};"
    "HOSTNAME = {};"
    "PORT = {};"
    "UID = {};"
    "SECURITY = SSL;"
    "SSLServerCertificate = {};"
    "PWD = {};"
).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())

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())
```