

Date	15 November2022
Team ID	PNT2022MID48213
Project name	Skills/Job Recommender Application

STEPS TO CREATE IBM DB2 AND CONNECTION WITH PYTHON

STEP 1: Import the `ibm_db` Python library:

```
!pip install --force-reinstall ibm_db==3.1.0 ibm_db_sa==0.3.7 import ibm_db
```

STEP 2: Identify the database connection credentials:

```
dsn_hostname = "2d46b6b4-cbf6-40eb-
bbce 6251e6ba0300.bs2io90l08kqb1od8lcg.databases.appdomain.cloud"
dsn_uid = "mnfrk567" dsn_pwd = "7RRvb9RDCoZ78j9l" dsn_driver =
"{IBM DB2 ODBC DRIVER}" dsn_database = "BLUDB"
# e.g. "BLUDB" dsn_port = "32328" # e.g. "32733"
dsn_protocol = "TCPIP" # i.e. "TCPIP" dsn_security = "SSL" #i.e.
"SSL"
```

STEP 3: Create the DB2 database connection:

```
dsn = (
"DRIVER={0};"
"DATABASE={1};"
"HOSTNAME={2};"
"PORT={3};"
"PROTOCOL={4};"
"UID={5};"
"PWD={6};"
"SECURITY={7};").
```

```
format(dsn_driver, dsn_database, dsn_hostname, dsn_port, dsn_protocol,
dsn_uid, dsn_pwd,dsn_security) print(dsn)
```

Now establish the connection to the database try:

```
conn = ibm_db.connect(dsn, "", "") print ("Connected to database: ",
dsn_database, "as user: ", dsn_uid, "on host:
", dsn_hostname) except:
```

```
print ("Unable to connect: ", ibm_db.conn_errormsg() )
```

```
server = ibm_db.server_info(conn) print
```

```
("DBMS_NAME: ", server.DBMS_NAME) print
```

```
("DBMS_VER: ", server.DBMS_VER) print ("DB_NAME:
```

```
", server.DB_NAME) client = ibm_db.client_info(conn)
```

```
print ("DRIVER_NAME: ", client.DRIVER_NAME) print
```

```
("DRIVER_VER: ", client.DRIVER_VER)
```

```
print ("DATA_SOURCE_NAME: ", client.DATA_SOURCE_NAME)
```

```
print ("DRIVER_ODBC_VER: ", client.DRIVER_ODBC_VER) print
```

```
("ODBC_VER: ", client.ODBC_VER)
```

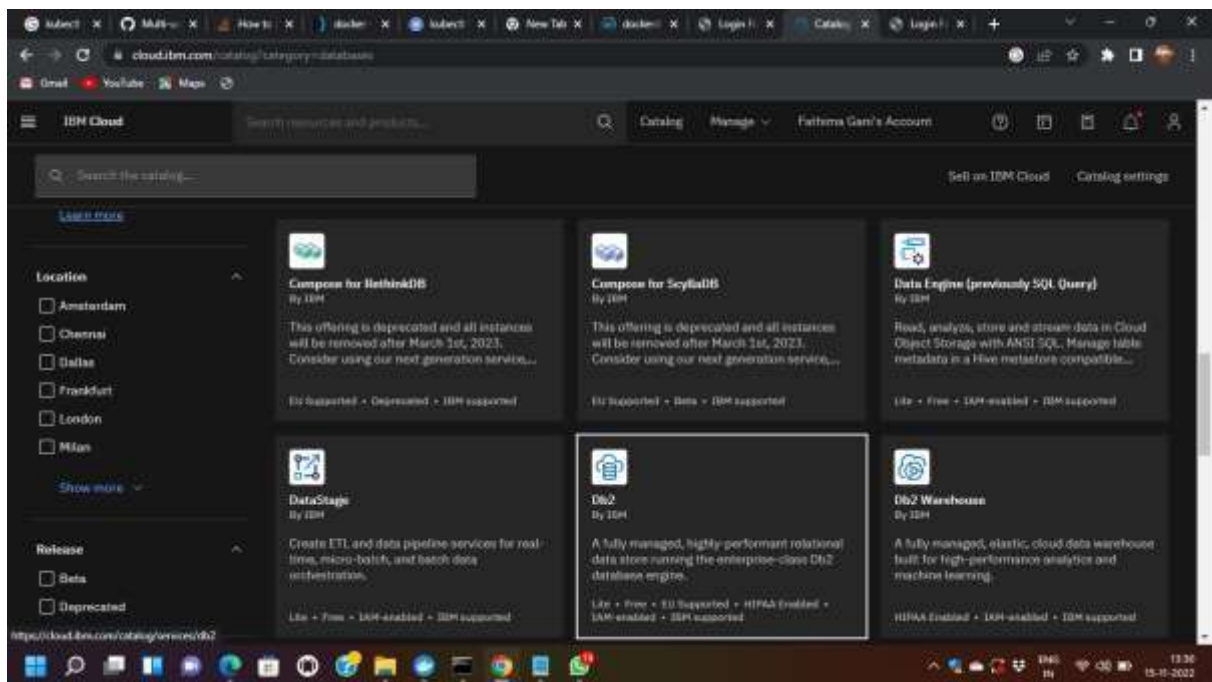
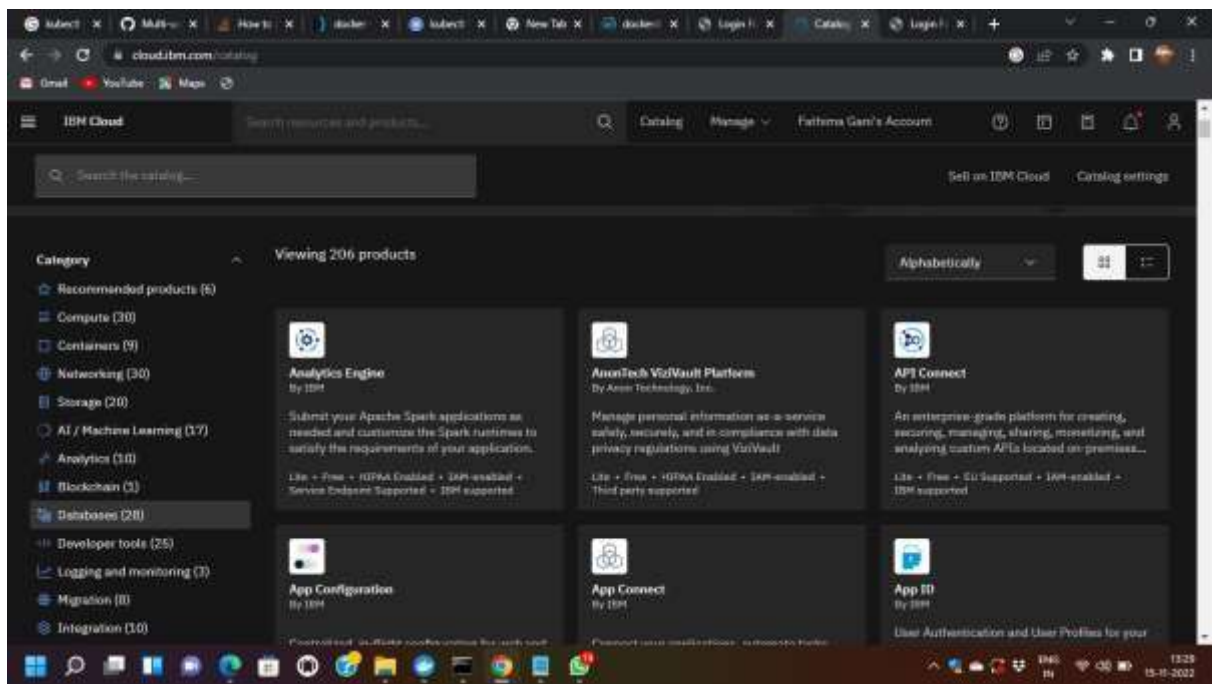
```
print ("ODBC_SQL_CONFORMANCE: ", client.ODBC_SQL_CONFORMANCE)
```

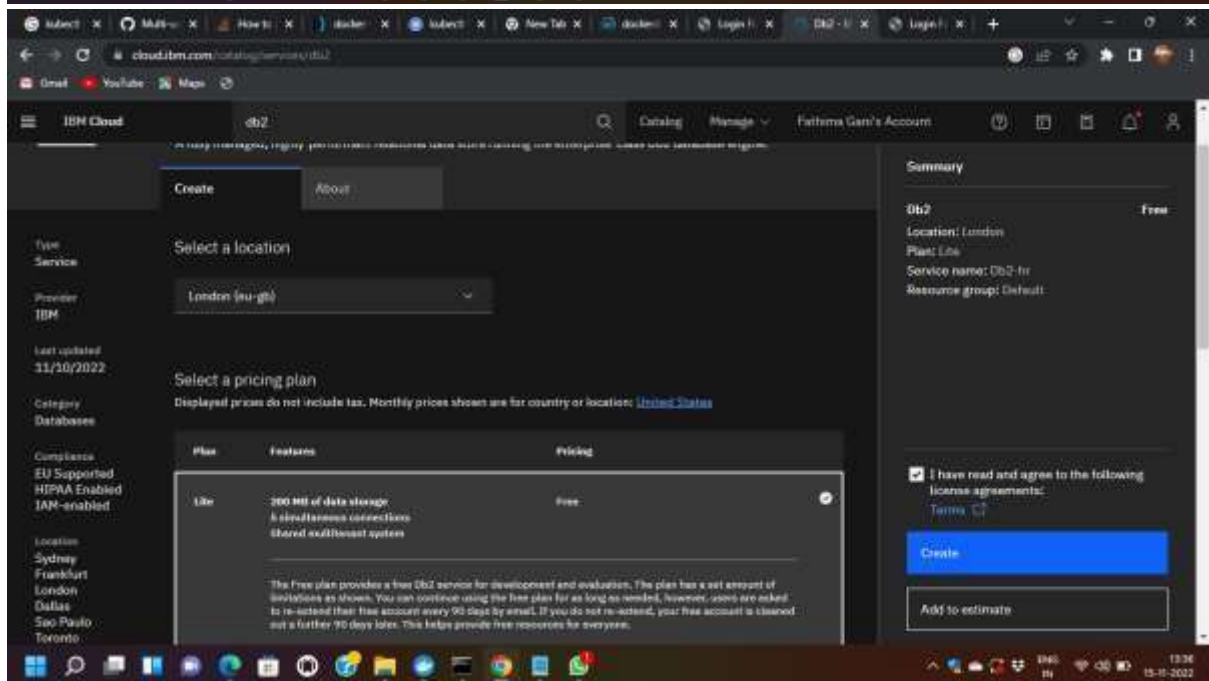
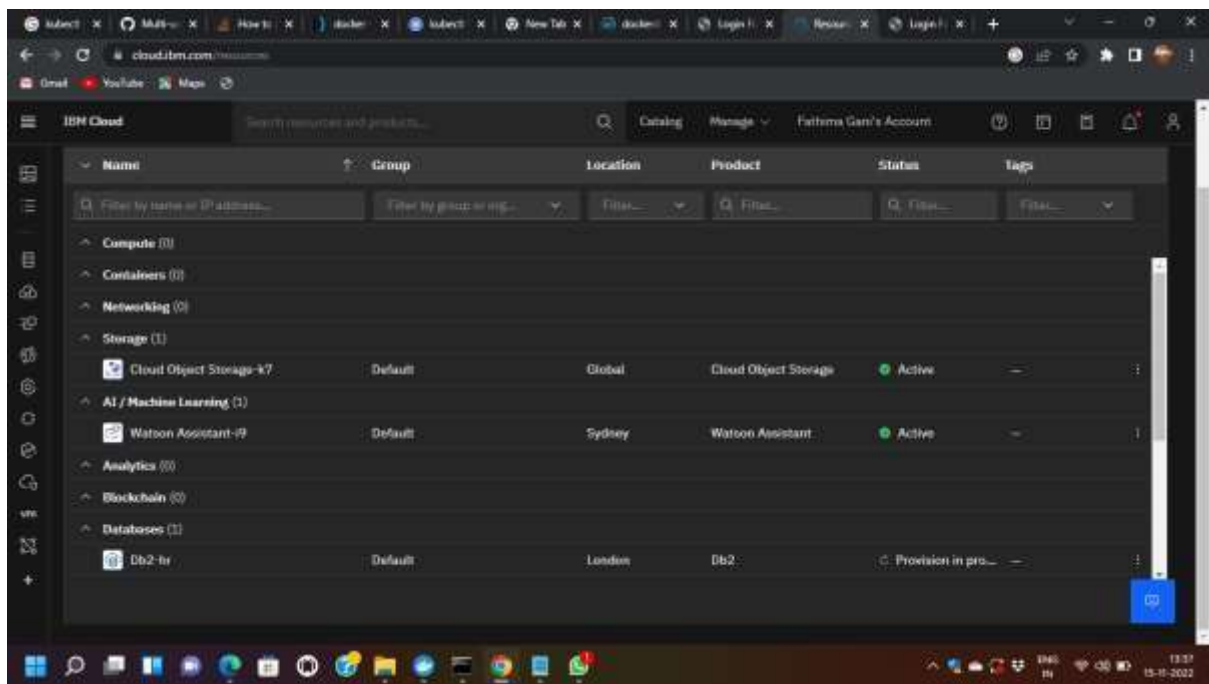
```
print ("APPL_CODEPAGE: ", client.APPL_CODEPAGE) print
```

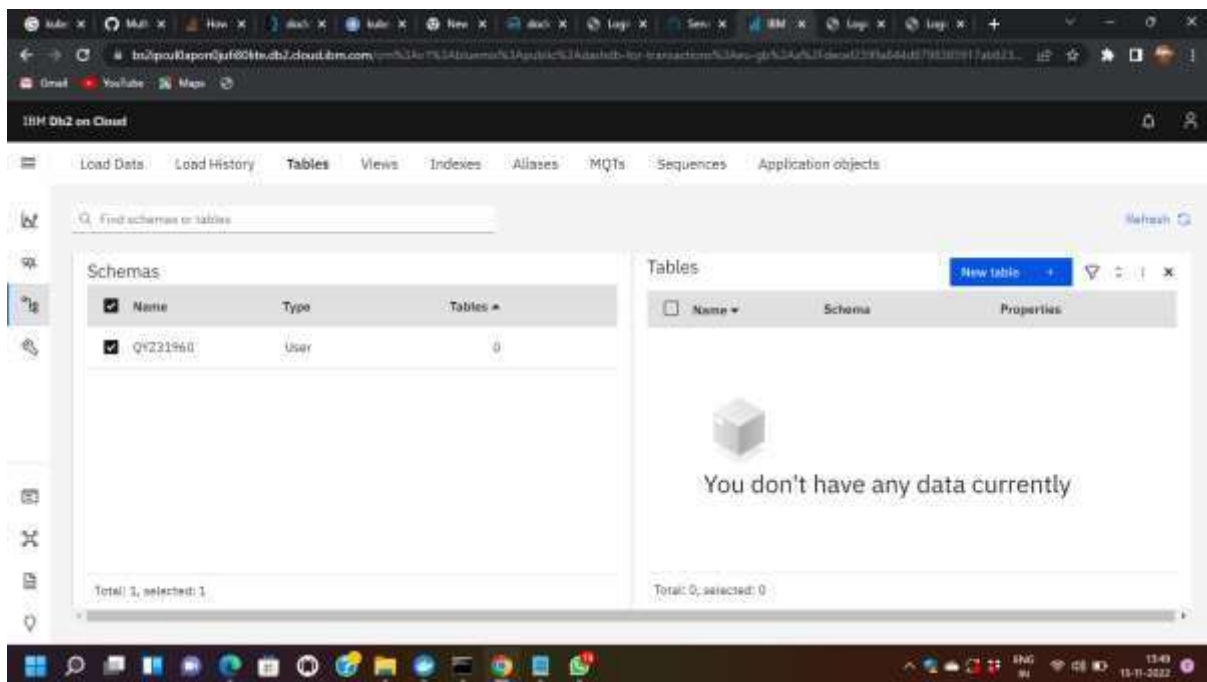
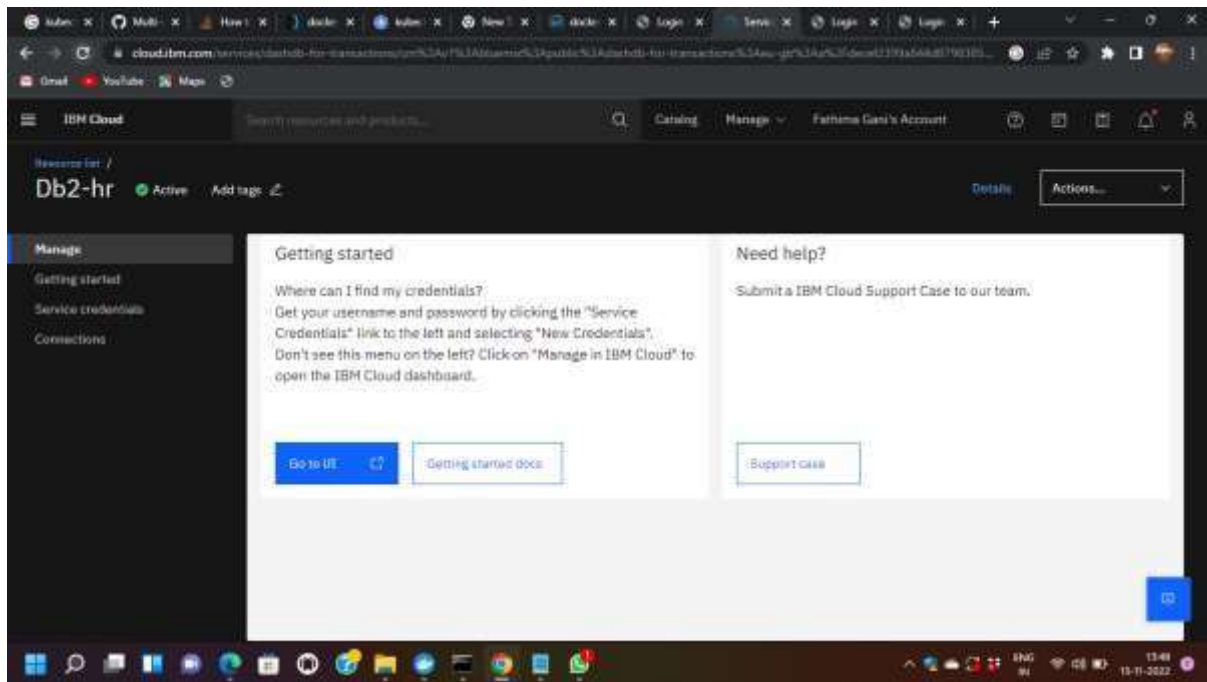
```
("CONN_CODEPAGE: ", client.CONN_CODEPAGE) STEP 4: Close the
```

Connection:

```
ibm_db.close(conn)
```







IBM Db2 on Cloud

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

Find schemas or tables Refresh

Tables New table

Name	Schema	Properties
DETALS	QYZ31960	...

Total: 1, selected: 0

Table definition

DETAILS

Name	Data type	Nullable	Length	Scale
candidate name	VARCHAR	Y	32	0
candidate age	INTEGER	Y		0
candidate gender	VARCHAR	Y	32	0
candidate educational qualification	VARCHAR	Y	32	0

View data

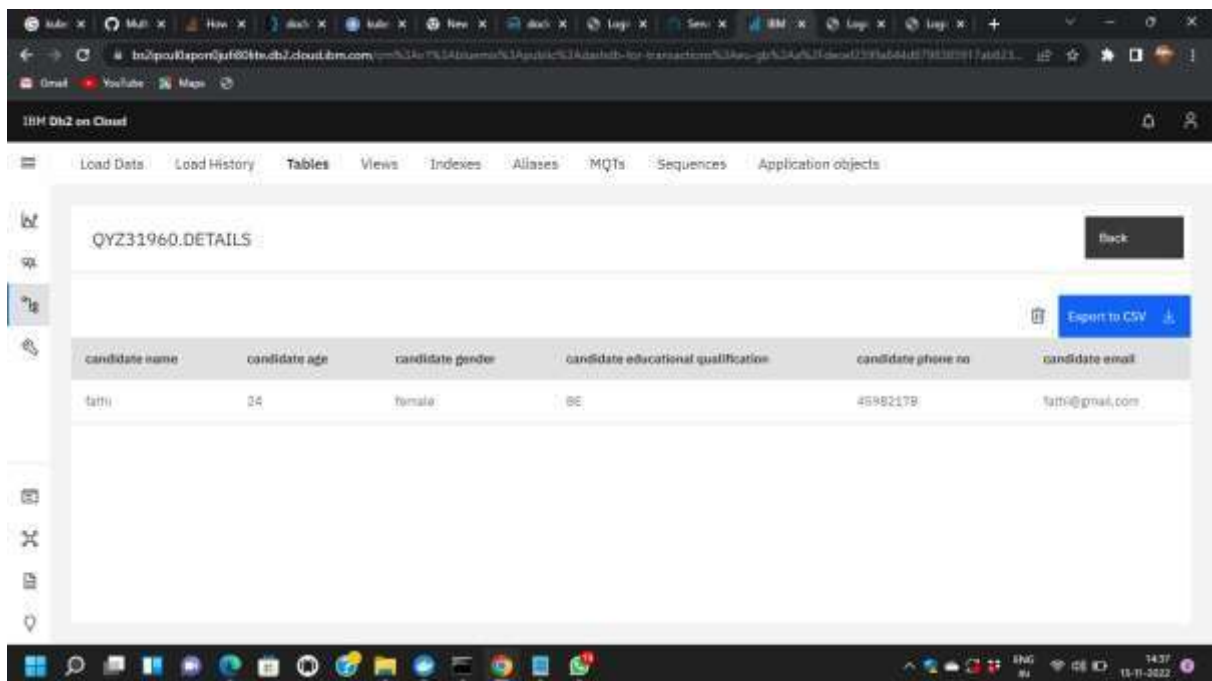
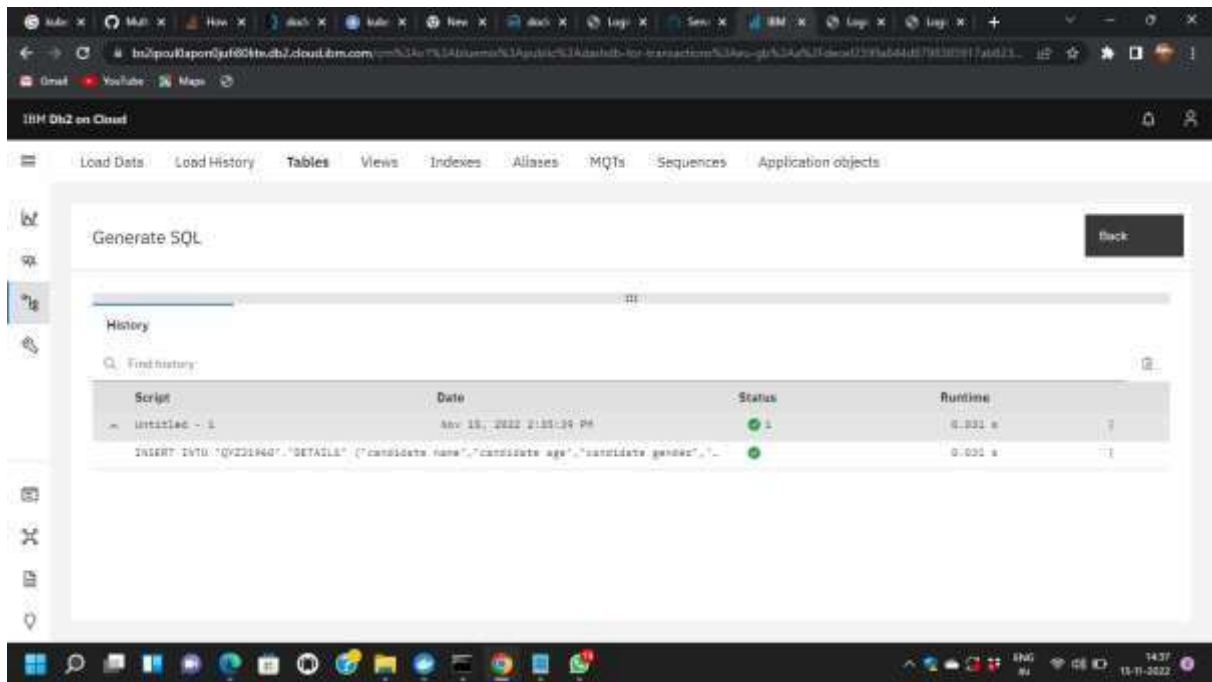
IBM Db2 on Cloud

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

QYZ31960.DETAILS Back

candidate name	candidate age	candidate gender	candidate educational qualification	candidate phone no	candidate email
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There is no data here yet




```
File Edit Selection View Go Run Terminal Help
app.py - X
C:\Users\mages\Desktop> python app.py
from flask import Flask

import sys
conn = sys_db.connect('MATABASE-slug(W807NAME=fsd88W3-usdb-Aa4f-a326-9822b9f9237b-0logj3sd0tstu6lqpe88.databases.applmain.cloud;PORT=32731;SECURITY=SSL;
SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=jdn36888;PWD=3167Nein3Kam[wl3]', '')
print(conn)
print('Connection Successful.....')

app = Flask(__name__)

@app.route('/')
def index():
    return '<center>hi48 Connected Successfully....</center>'

# Error: Could not locate a Flask application. Use the 'flask --app' option, 'FLASK_APP' environment variable, or a 'wsgi.py' or 'app.py' file in the current directory.
PS C:\Users\mages\Desktop> cd .\Desktop\
PS C:\Users\mages\Desktop> flask --debug run
* Running on http://127.0.0.1:5000
Press CTRL-C to quit
* Restarting with stat
* Connection Successful.....
* Debugger is active!
* Debugger PIN: 131-655-442
```

```
File Edit Selection View Go Run Terminal Help
app.py - X
C:\Users\mages\Desktop> python app.py
from flask import Flask

import sys
conn = sys_db.connect('MATABASE-slug(W807NAME=fsd88W3-usdb-Aa4f-a326-9822b9f9237b-0logj3sd0tstu6lqpe88.databases.applmain.cloud;PORT=32731;SECURITY=SSL;
SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=jdn36888;PWD=3167Nein3Kam[wl3]', '')
print(conn)
print('Connection Successful.....')

app = Flask(__name__)

@app.route('/')
def index():
    return '<center>hi48 Connected Successfully....</center>'

Connection Successful.....
* Debugger is active!
* Debugger PIN: 131-655-442
127.0.0.1 - - [16/Nov/2022 12:25:12] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [16/Nov/2022 12:25:49] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [16/Nov/2022 12:26:01] "GET / HTTP/1.1" 200 -
* Detected change in 'C:\Users\mages\Desktop\app.py', reloading
* Restarting with stat
* Connection Successful.....
* Debugger is active!
* Debugger PIN: 131-655-442
127.0.0.1 - - [16/Nov/2022 12:26:27] "GET / HTTP/1.1" 200 -
```

127.0.0.1:5000

DB Connected Successfully....