STEPS TO CREATE IBM DB2 AND CONNECTION WITH PYTHON

TEAM ID: PNT2022TMID18477

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 = 9938aec0-8105-433e-8bf9-
0fbb7e483086.clogj3sd@tgtulqde00.databases.appdomain.cloud+
dsn_uid = "fsd29379"
 dsn_pwd = "sCnrYPTDuCpOSGc0"
dsn_driver = "{IBM DB2 ODBC DRIVER}"
 dsn_database = "BLUDB"
dsn_port = "32459"
dsn_protocol = "TCPIP"
dsn_security = "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)
```