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 = "vjd29721" dsn_pwd = "6TTgx8MRBzT45o3q" 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)
       ("DRIVER_NAME:
print
                               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)