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)

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)
```