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 = "  ba99a9e6-d59e-4883-8fc0-
d6a8c9f7a08f.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud:31321"
dsn_uid = "  msx48680" dsn_pwd = "5P90FMYqRfK3o7lH "
dsn_driver = "{IBM DB2 ODBC DRIVER}" dsn_database = "  bludb
"

# e.g. "BLUDB" dsn_port = "31321

" # 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)
```