

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.database  
s.appdomain.cloud"
```

```
dsn_uid = "ndk88464" dsn_pwd = "750yT0e0a3R7CpuJ" dsn_driver = "{IBM DB2  
ODBC DRIVER}" dsn_database = "BLUDB" # e.g. "BLUDB" dsn_port = "32328"
```

```
dsn_protocol
```

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)
```