

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:

```
g.db = ibm_db.connect("DATABASE=bludb;HOSTNAME=54a2f15b-5c0f-46df-8954-  
7e38e612c2bd.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32733;SECURITY=SSL;SSL  
ServerCertificate=DigiCertGlobalRootCA.crt;UID=jpj21911;PWD=1PL7kQRBzwbucYFo;", "", "")
```

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)
```