

STEPS TO CREATE IBM DB2 AND CONNECTION WITH PYTHON

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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 = "b70af05b-76e4-4bca-a1f5  
23dbb4c6a74e.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud"  
  
dsn_uid = "mcp42986" dsn_pwd = "7jL8xip5KD9UjxHo"  
  
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

databasetry:

```
    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)
```