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 = "b1bc1829-6f45-4cd4-bef4-10cf081900bf.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud”
"dsn_uid = "bgx86936"
 dsn_pwd = "LDBdZPnYhnaBy1iv"
dsn_driver = "{IBM DB2 ODBC DRIVER}"
 dsn_database = "BLUDB"
dsn_port = "31198"
dsn_protocol  = "TCPIP"
dsn_security = "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)
```