

Create IBM DB2 and Connect with Python

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Team ID	PNT2022TMID43323
Project Name	Inventory Management System for Retailers

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 =  
"2d4b6b4cbf6-40ebbbce-6251e6ba0300.bs2io90l08kqb1od8lcg.databases.appdomain.cloud"  
dsn_uid = "vjd29721"  
dsn_pwd = "6TTgx8MRBzT45o3q"  
dsn_driver = "{IBM DB2 ODBC DRIVER}"  
dsn_database = "BLUDB"  
dsn_port = "32328" # e.g. "32733"  
dsn_protocol = "TCPIP" # i.e. "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)
```