# STEPS TO CREATE IBM DB2 AND CONNECTION WITH PYTHON

## TEAM ID: PNT2022TMID14813

### 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.databases.appdomain.cloud"

dsn_uid = "vjd29721"          dsn_pwd =

"6TTgx8MRBzT45o3q" 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};"

```python
    "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
```

```python
("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:**
```python
ibm_db.close(conn)
```