### 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:

### 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
                             ", client.DRIVER_VER) print
("DRIVER_VER:
("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)