STEPS TO CREATE IBM DB2 AND CONNECTION WITH PYTHON

Date	12 November 2022
Team ID	PNT2022TMID02676
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 = "hostname"
dsn_uid = "uid"
dsn_pwd = "pwd"
dsn_driver = "{IBM DB2 ODBC DRIVER}"
dsn_database = "BLUDB" # e.g. "BLUDB"
dsn_port = "port" # 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 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)
```