

Project Name : Personal Expense Tracker Application

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CREATING 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:

```
dsn_hostname = "2d46b6b4-cbf6-40eb-bbce6251e6ba0300.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};" "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)
```