

# CREATE IBM DB2 AND CONNECT WITH PYTHON

## PNT2022TMID13254

### 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 =
```

```
"84afae526a442a783e90feb004a15a7.databases.appdomain.cloud"
```

```
dsn_uid = "951919CS054@smartinternz.com"
```

```
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)
```

