

## STEPS TO CREATE IBM DB2 AND CONNECTION WITH PYTHON

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Project Name	News Tracker Application

**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-cbf6-403b-bbce-  
6251e6ba0300.bs2io90I08kqb1od8Icg.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"
```

```
# e.g. "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)
```

```
printf("CONN_CODEPAGE:  ", client.CONN_CODEPAGE)
```

**STEP 4: Close the connection:**

```
ibm_db.close(conn)
```