

**IMPLEMENTING WEB APPLICATION
CREATE IBM DB2 AND CONNECT WITH PYTHON**

Date	15 November 2022
Team ID	PNT2022TMID20598
Project Name	Skill / Job Recommender-Cloud Application Development
Maximum Marks	4 Marks

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-bbce-6251e6ba0300.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:

```
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)
```