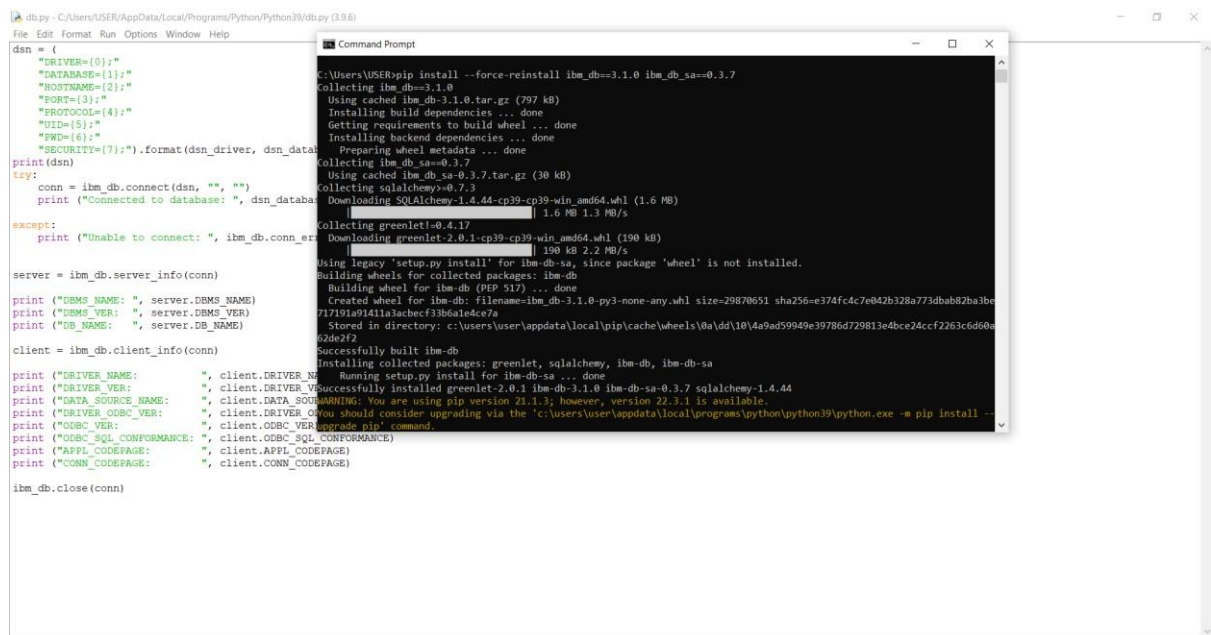


IMPLEMENTING WEB APPLICATION

CREATE IBM DB2 AND CONNECT WITH PYTHON

DATE	14/11/2022
TEAM ID	PNT2022TMID16233
PROJECT NAME	Nutrition Assistant Application

STEP 1: Import the ibm_db Python library `pip install --force-reinstall ibm_db==3.1.0 ibm_db_sa==0.3.7`



The screenshot shows a Python script in a text editor and a Command Prompt window. The Python script defines a DSN (Data Source Name) and attempts to connect to an IBM DB2 database using the ibm_db and ibm_db_sa libraries. The Command Prompt window shows the execution of the command `pip install --force-reinstall ibm_db==3.1.0 ibm_db_sa==0.3.7`, which successfully installs the required packages. The output of the command includes the following text:

```
C:\Users\USER>pip install --force-reinstall ibm_db==3.1.0 ibm_db_sa==0.3.7
Collecting ibm_db==3.1.0
  Using cached ibm_db-3.1.0.tar.gz (797 kB)
Installing build dependencies ... done
Getting requirements to build wheel ... done
Installing backend dependencies ... done
  Preparing wheel metadata ... done
Collecting ibm_db_sa==0.3.7
  Using cached ibm_db_sa-0.3.7.tar.gz (30 kB)
Collecting sqlalchemy==0.7.3
  Downloading SQLAlchemy-1.4.44-cp39-cp39-win_and64.whl (1.6 MB)
    |#####| 1.6 MB 1.3 MB/s
Collecting greenlet==0.4.17
  Downloading greenlet-2.0.1-cp39-cp39-win_and64.whl (100 kB)
    |#####| 100 kB 2.2 MB/s
Using legacy 'setup.py install' for ibm-db-sa, since package 'wheel' is not installed.
Building wheels for collected packages: ibm-db
  Building wheel for ibm-db (PEP 517) ... done
  Created wheel for ibm-db: filename=ibm_db-3.1.0-py3-none-any.whl size=29870651 sha256=e374fc4c7e042b328a773dbab82ba3be717191a91411a3acbef3bb6a1edce7a
  Stored in directory: c:\users\user\appdata\local\pip\cache\wheels\0a\dd\10\4a9ad59949e39786d729813e4bce24cfcf2263c6d60a62de2f2
Successfully built ibm-db
Installing collected packages: greenlet, sqlalchemy, ibm-db, ibm-db-sa
  Running setup.py install for ibm-db-sa ... done
Successfully installed greenlet-2.0.1 ibm-db-3.1.0 ibm-db-sa-0.3.7 sqlalchemy-1.4.44
WARNING: You are using pip version 21.1.3; however, version 22.3.1 is available.
You should consider upgrading via the 'c:\users\user\appdata\local\programs\python\python39\python.exe -m pip install --upgrade pip' command.
```

STEP 2: 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)  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)  ibm_db.close(conn)

```