

```

import ibm_db
import pandas as pd

# Replace these with your database credentials
db_credentials = {
    'hostname': 'your_hostname',
    'port': 'your_port',
    'user': 'your_username',
    'password': 'your_password',
    'database': 'your_database'
}

# Connect to the Db2 Database
conn_str =
f"DATABASE={db_credentials['database']};HOSTNAME={db_credentials['hostname']};PORT={db_credentials['port']};PROTOCOL=TCPIP;UID={db_credentials['user']};PWD={db_credentials['password']}"
conn = ibm_db.connect(conn_str, '', '')

if conn:
    print("Connected to the database")
else:
    print("Failed to connect")

# Query the Data
sql = "SELECT * FROM your_table"
stmt = ibm_db.exec_immediate(conn, sql)

# Fetch data into a Pandas DataFrame
data = []
while ibm_db.fetch_row(stmt):
    data.append([ibm_db.result(stmt, i) for i in
range(ibm_db.num_fields(stmt))])

column_names = [ibm_db.field_name(stmt, i) for i in
range(ibm_db.num_fields(stmt))]

df = pd.DataFrame(data, columns=column_names)

# Data Analysis and Visualization (Sample)
# You can perform various data analysis tasks here, including data
preprocessing, aggregation, and visualization.

# Example: Calculate the average of a numeric column
average_value = df['numeric_column'].mean()
print(f"Average value: {average_value}")

# Close the Database Connection
ibm_db.close(conn)

```