### Usage of psycopg libraries to perform PSQL operation in python

### **Explanation of Queries:**

Note: All queries are performed from a Python file and store the output on one variable.

#### **Query 1: LEFT JOIN**

* Retrieves all customers, whether they have placed orders or not.
* Joins the customers table with orders and products using LEFT JOIN.
* Uses COALESCE to handle NULL values for customers without orders, showing 0 for their total order value. - R&D on the COALESCE and use that on query

#### **Query 2: RIGHT JOIN**

* Retrieves all products and filters to include only those that have never been ordered.
* Uses a RIGHT JOIN between products and orders, with a WHERE o.id IS NULL clause to identify unmatched rows.

#### **Query 3: INNER JOIN**

* Retrieves all high-value orders (where product price > $50).
* Joins orders, customers, and products with an INNER JOIN.
* Calculates the total value of each order (p.price \* o.quantity)

R&D On:

* Collation on a table,
* Functions of PSQL
* Copy the output of queries with the header in a CSV file with the COPY command – Attach the CSV file on assignment submission.

PSQL Commands: https://www.geeksforgeeks.org/postgresql-psql-commands/