1. **Generating transactions with transactions.py**

   - **When generating transactions with transactions.py file** the exchange_rates.csv file should be in the same folder as the transactions.py file, it will load the exchange rates from 01.01.2023 - 29.11.2024 from there.

   - Look for the descriptions on top of defined functions that names are listed below:
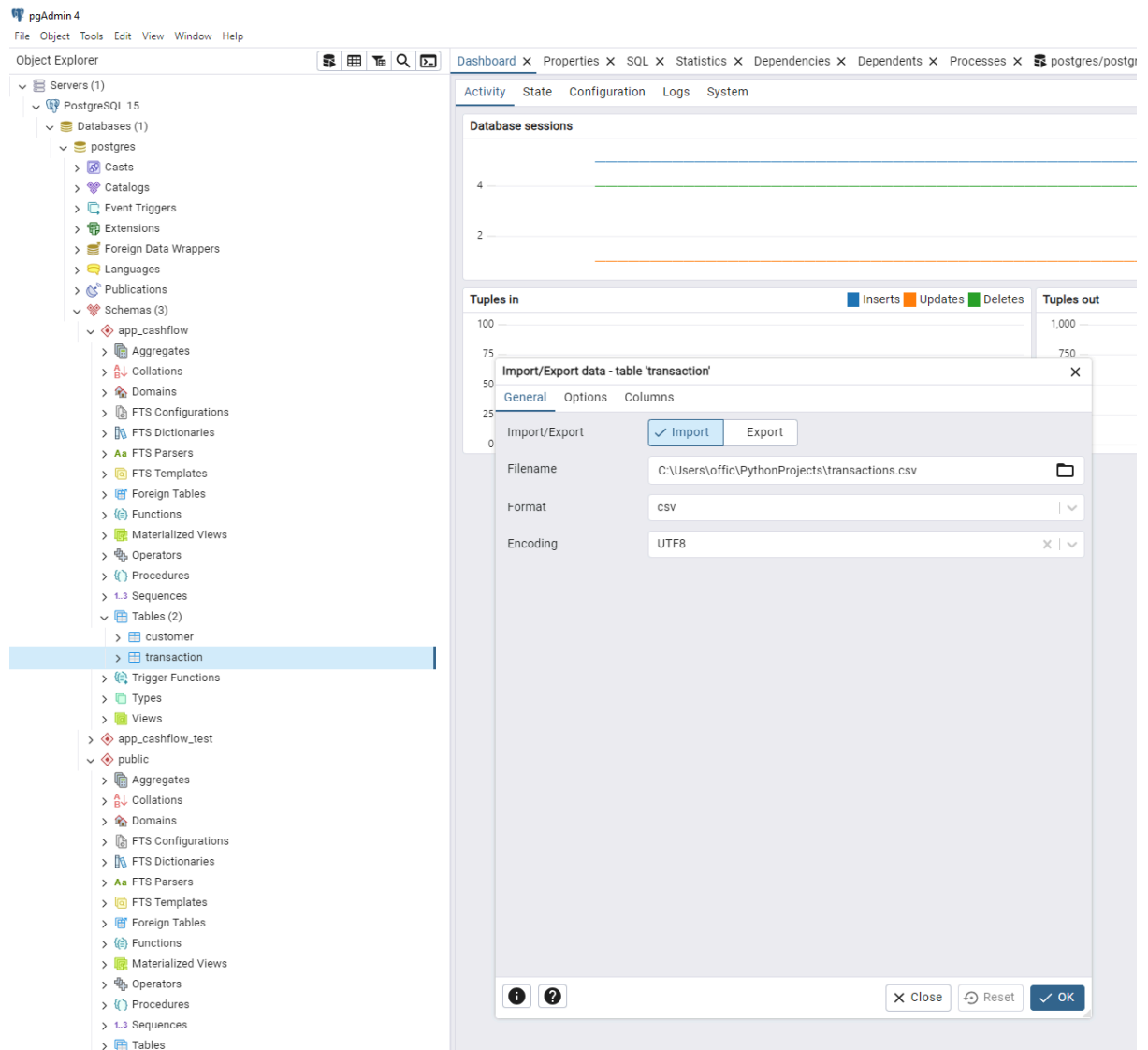
     ```
     generate_transactions_1(num_transactions,
     transaction_id, seb_customer=None)
     generate_transactions_seb_2a(num_transactions, id,
     selected_seb_customers)
     generate_transactions_seb_2b(num_transactions, id,
     selected_seb_customers, type)
     generate_transactions_3(num_transactions,
     transaction_id, dc, selected_seb_customers,
     counterparties)
     generate_transactions_4(num_transactions,
     transaction_id, dc, selected_seb_customers,
     counterparties)
     ```

   - functions are called in the bottom of the **transactions.py** file from `def main():` function.
   - SEB Customer companies, in list `seb_customers_companies` are hard coded along with their bank accounts `seb_customers_ibans_companies.` Company with id = "000001" and name "`Oval-O Eesti AS`" represents a chain store in Estonia with 30 different bank accounts. Chain stores from the same parent company in different countries are hardcoded in list `oval_group_counterparties` so it is possible to generate transactions between them. Also since these are stores, many customers should be of Private type.
   - SEB Customer companies with ids "000002" to "000008" in list `seb_customers_companies` represent companies with different activities, but belong to the same parent, so transactions between them could be more significant.

2. How to add "customers.csv" and "transactions.csv" to database via PgAdmin

1. open PgAdmin -> Servers -> Databases -> postgres -> Schemas -> app_cashflow ->
   Tables -> customer (transaction second time) (right click opens menu) ->
   Import/Export Data …

2. First choose path to customers.csv file (second time path to transactions.csv, picture
   corresponds to adding transactions)

3. Switch Header on, put Null Strings null

4. In case of transactions, from the columns tab, remove the "id" column, it does not exist in the csv file, the database will create it automatically. But if you don't remove it, you will get an error, because it will be looked during Import and it will give an error. (It took about 35 seconds to import a million rows of transactions).