The dataset describes the transactions made via PayPal in September 2022.

It contains two tables:

- fact transactions (**Transaction id**, payer id, receiver id, amount, transaction date)
- dim_accounts (account id, name, city, balance)

fact daily posts:

Transaction_id: the identifier of the transaction

payer_id: the identifier of the payer who sends money

receiver_id: the identifier of the receiver who receives money

amount: the amount of the transaction

transaction_date: the timestamp of the transaction

dim accounts:

account_id: the identifier of the account registered in PayPal

name: the name of the account owner city: the city of the account owner

balance: the initial balance of the account before any transaction

SQL Questions

Easy Ranking of cities

• Find the final transaction balance of each city (the difference between all the money received by the city inhabitants and the money sent) and display the result in descending order of the transaction balance.

Medium Unique money transfer relationships

 A two-way unique relationship is established when two people send money back and forth. Find the number of two-way unique relationships in this data

Medium Final balance

 Find the number of accounts that have a final balance (after all transactions have been completed) greater than \$1,000.

(Be careful: there are accounts that have not made paying transactions and accounts that have not received)

Hard Cumulative balance

• Find the cumulative balance over transactions of the account owned by 'James Thompson'. Output the transaction dates and cumulative balances.

Hints

- 1) The first city is Texas with a balance equal to 2255 \$
- 2) 10 relationships
- 3) 64 balances
- 4) The final cumulative balance is equal to 201 \$