Step 2. Extract the ERD:

- Download and install DbVisualizer or Lucidchart (if you haven't already done so).
- Extract the ERD from the Rockbuster database and save it as an image (PNG or JPEG) using the instructions in the Exercise.
- Copy-paste the ERD into your answers document.

Step 3. Create the first draft of a data dictionary:

- Take a moment to examine your ERD. Does the Rockbuster database have a snowflake schema or a star schema? Write a brief explanation for your answer.

  It is a snow flake schema, because it is represented by a centralized fact tables which are connected to multiple dimensions and sub-dimensions tables.

- List all the fact tables and all the dimension tables in the schema. For each table, list every column and its data type, and write a brief description of the column. To get an idea of what this should look like, check out these example fact and dimension tables.

- If a column name doesn't tell you enough to write a description, you can also view the tables in pgAdmin 4. The SQL syntax for selecting a table is SELECT * FROM table_name. So SELECT * FROM film would return the film table, for example

Fact Table

Payment

Column	Data Type	Description
payment_id	Integer	Number assigned to payment
customer_id	Smallint	Number assigned to customer
staff_id	Smallint	Number assigned to employee (staff)
rental_id	Integer	Number assigned to rental
amount	Numeric(5,2)	Aammount paid
payment_date	Timestamp without time zone	Date of payment

Store

Column	Data Type	Description
store_id	Integer	Number assigned to store
manager_staff_id	Smallint	Number assigned to store manager
address_id	smallint	Number assigned to store address
last_update	Timestamp without time zone	Date when the last entry was updated

film_category

Column	Data Type	Description
film_id	Smallint	Number assigned to film
category_id	Smallint	Number assigned to genre/category
last_update	Timestamp without time zone	Date when the last entry was updated

Film_actor

Column	Data Type	Description
actor_id	Smallint	Number assigned to actor
film_id	Smallint	Number assigned to film
last_update	Timestamp without time zone	Date entry was last updated

Dimension Tables

Rental

Column	Data Type	Description
rental_id	serial	Number assigned for rental
rental_date	Timestamp without time zone	Date of rental
inventory_id	integer	Number assigned to item
customer_id	smallint	Number assigned to customer
return_date	Timestamp without time zone	Date when rental was returned
staff_id	smallint	Number assigned to employee
Last_update	Timestamp without time zone	Date when last entry was updated

Inventory

Column	Data Type	Description
inventory_id	Integer	Number assigned to item
film_id	Smallint	Number assigned to film
store_id	Smallint	Nummber assigned to store
last_update	Timestamp without time zone	Date when the last entry was updated

Customer

Column	Data Type	Description
customer_id	Integer	Number assigned to customer
store_id	Smallint	Number assigned to store
first_name	Character varying	First name of the customer
last_name	Character varying	Last name of the customer
email	Character varying	E.mail from the customer
address_id	Smallint	Number assigned to customers address
activebool	boolean	Customers active status
create_date	date	Date when the entry was created
last_update	Timestamp without time zone	Date when the entry was last updated
active	integer	Customers active status

Staff

Column	Data Type	Description
staff_id	Integer	Number assigned to staff
first_name	Character varying	First name of employee
last_name	Character varying	Last name of employee
address_id	smallint	Number assigned to employes address
email	Character varying	E.mail address of employess
store_id	smallint	Number assigned to store
active	boolean	Employee active status
username	Character varying	Username of employee
password	Character varying	Password of employee
last_update	Timestamp without time zone	Date entry was last updated
picture	bytea	Picture of employee

Actor

Column	Data Type	Description
actor_id	integer	Number assigned to actor
first_name	Character varying	First name of actor
last_name	Character varying	Last name of actor
last_update	Timestamp without time zone	Date entry was last updated

Film

Column	Data Type	Description
film_id	integer	Number assigned to film
title	Character varying	Title of film
description	text	Description of film
release_year	integer	Release year of film
language_id	Smallint	Number assigned to film language
rental_duration	smallint	Length of film rental
rental_rate	numeric	Price of rental
length	smallint	Length of film
replacement_cost	numeric	Cost of film replace
rating	mpaa_rating	Film rating
last_update	Timestamp without time zone	Date entry was last updated
special_features	text	Special features included with film
fulltext	tsvector	Keywords associated with film

Category

Column	Data Type	Description
category_id	Integer	Number assigned to language
Name	Character varying	Name of language
last_update	Timestamp without time zone	Date entry was last updated

Address

Column	Data Type	Description
address_id	integer	Number assigned to address
address	Character varying	Street address
address2	Character varying	Supplementary address
district	Character varying	District
city_id	smallint	Number assigned to city
postal_code	Character varying	Postal Code
phone	Character varying	Phone number
last_update	Timestamp without time zone	Date entry was last updated

Language

Column	Data Type	Description
language_id	Integer	Number assigned to language
name	Character	Name of language
last_update	Timestamp without time zone	Date entry was last updated

City

Column	Data Type	Description
city_id	integer	Number assigned to city
city	Character varying	Name of city
country_id	smallint	Name assigned to country
last_update	Timestamp without time zone	Date entry was last updated

Country

Column	Data Type	Description
country_id	serial	Number assigned to country
country	varchar	Name of country
last_update	timestamp	Date entry was last updated

Step 4.

Use your data dictionary to figure out which tables you'd need to answer the questions below:

- Which actors brought Rockbuster the most revenue?

  For this situation I would have to connect “actor” with “payment” table.

  It would be these sequence of tables:

  actor> film_actor > inventory> rental > payment

- What language are the majority of movies in the collection?

  For this situation I would use:

  language » film » inventory Tables