





3a. Snowflake, as there is considerable branching rather than everything being attached to a single table.

Fact Tables: Rental

<i>Column</i>	<i>Data Type</i>	<i>Description</i>
rental_id	SERIAL	assigned to rental
Rental_date	TIMESTAMP (6) WITHOUT TIMEZONE	Date of rental
Inventory_id	INTEGER	Number assigned to item
Customer_id	SMALLINT	Number assigned to customer
Return_date	TIMESTAMP (6) WITHOUT TIMEZONE	Date rental was returned
Staff_id	SMALLINT	Number assigned to employee checking out customer
Last_update	TIMESTAMP (6) WITHOUT TIMEZONE	Date entry was last updated

Dimension Tables: Payment

<i>Column</i>	<i>Data Type</i>	<i>Description</i>
Payment_id	SERIAL	Number assigned to payment
Customer_id	SMALLINT	Number assigned to customer
Staff_id	SMALLINT	Number assigned to employee checking out customer
Rental_id	INTEGER	Number assigned to rental
amount	NUMERIC (5,2)	Amount paid
Payment_date	TIMESTAMP (6) WITHOUT TIMEZONE	Date of payment

Dimension Tables: Store

<i>Column</i>	<i>Date Type</i>	<i>Description</i>
Store_id	SERIAL	Number assigned to store
Manager_staff_id	SMALLINT	Number assigned to store manager
Address_id	SMALLINT	Number assigned to store address
Last_update	TIMESTAMP (6) WITHOUT TIMEZONE	Date of entry last updated

Dimension Tables: Film Actor

<i>Column</i>	<i>Date Type</i>	<i>Description</i>
actor_id	SMALLINT	Number assigned to actor
film_id	SMALLINT	Number assigned to film
last_update	TIMESTAMP (6) WITHOUT TIMEZONE	Date of entry last updated

Dimension Tables: Inventory

<i>Column</i>	<i>Date Type</i>	<i>Description</i>
inventory_id	SERIAL	Number assigned to item
film_id	SMALLINT	Number assigned to film
Category_id	SMALLINT	Number assigned to store
Last_update	TIMESTAMP (6) WITHOUT TIMEZONE	Date of entry last updated

Dimension Tables: Film Category

<i>Column</i>	<i>Date Type</i>	<i>Description</i>
film_id	SMALLINT	Number assigned to film
Category_id	SMALLINT	Number assigned to store
Last_update	TIMESTAMP (6) WITHOUT TIMEZONE	Date of entry last updated

Dimension Tables: Customer

<i>Column</i>	<i>Date Type</i>	<i>Description</i>
customer_id	SERIAL	Number assigned to customer
store_id	SMALLINT	Number assigned to store
first_name	CHARACTERVARYING (45)	First name of customer
last_name	CHARACTERVARYING (45)	Last name of customer
email	CHARACTERVARYING (50)	Email address of customer
activebool	BOOLEAN	Is customer active?
create_date	DATE	Date of entry last created
Last _update	TIMESTAMP (6) WITHOUT TIMEZONE	Date of entry last updated
active	INTEGER	Is customer active?
address_id	SMALLINT	Number assigned to customers address

Dimension Tables: Staff

<i>Column</i>	<i>Date Type</i>	<i>Description</i>
staff_id	SERIAL	Number assigned to employee
store_id	SMALLINT	Number assigned to store
first_name	CHARACTERVARYING (45)	First name of customer
last_name	CHARACTERVARYING (45)	Last name of customer
email	CHARACTERVARYING (50)	Email address of employee
username	CHARACTERVARYING (16)	Username of employee
password	CHARACTERVARYING (40)	Password of employee
Last_update	TIMESTAMP (6) WITHOUT TIMEZONE	Date of entry last updated
active	INTEGER	Is customer active?
picture	BYTEA	Picture of employee

Dimension Tables: Actor

<i>Column</i>	<i>Date Type</i>	<i>Description</i>
actor_id	SERIAL	Number assigned to actor
first_name	CHARACTERVARYING (45)	First name of customer
last_name	CHARACTERVARYING (45)	Last name of customer
Last_update	TIMESTAMP (6) WITHOUT TIMEZONE	Date of entry last updated

Dimension Tables: Film

<i>Column</i>	<i>Date Type</i>	<i>Description</i>
Film_id	SERIAL	Number assigned to film title
title	CHARACTERVARYING (255)	Title of film description
Description	TEXT	Description of film
Release_year	YEAR	Release year of film
Language_id	SMALLINT	Number assigned to language of film
Rental_duration	SMALLINT	Length of film rental
Rental_rate	NUMERIC (4,2)	Price of film rental
length	SMALLINT	Length of film
Replacement_cost	NUMERIC (4,2)	Cost to replace film
rating	mpaa_rating	Film rating
Last_update	TIMESTAMP (6) WITHOUT TIMEZONE	Date entry was last updated
Special_features	TEXT	Special features included with film
fulltext	TSVECTOR	Keywords associated with film

Dimension Tables: Category

<i>Column</i>	<i>Date Type</i>	<i>Description</i>
category_id	SERIAL	Number assigned to genre
name	CHARACTERVARYING (25)	Name of genre
Last _update	TIMESTAMP (6) WITHOUT TIMEZONE	Date of entry last updated

Dimension Tables: Address

<i>Column</i>	<i>Date Type</i>	<i>Description</i>
address_id	SERIAL	Number assigned to address
address	CHARACTERVARYING (50)	Street address
Address2	CHARACTERVARYING (50)	Supplemental Street address
District	CHARACTERVARYING (20)	District
city_id	SMALLINT	Number assigned to city
postal_code	CHARACTERVARYING (10)	Postal code
phone	NUMERIC (10)	Phone number
Last _update	TIMESTAMP (6) WITHOUT TIMEZONE	Date of entry last updated

Dimension Tables: Language

<i>Column</i>	<i>Date Type</i>	<i>Description</i>
language_id	SERIAL	Number assigned to language
name	CHARACTERVARYING (20)	Name of language
Last _update	TIMESTAMP (6) WITHOUT TIMEZONE	Date of entry last updated

Dimension Tables: City

<i>Column</i>	<i>Date Type</i>	<i>Description</i>
city_id	SERIAL	Number assigned to city
city	CHARACTERVARYING (20)	Name of city
Last _update	TIMESTAMP (6) WITHOUT TIMEZONE	Date of entry last updated
country_id	SMALLINT	Number assigned to country

Dimension Tables: Country

<i>Column</i>	<i>Date Type</i>	<i>Description</i>
country_id	SERIAL	Number assigned to country
country	CHARACTERVARYING (50)	Name of country
Last _update	TIMESTAMP (6) WITHOUT TIMEZONE	Date of entry last updated

4a. The “actor” table tells me the name of each actor, the “film_actor” table tells me which films each actor is associated with, the “film” table tells me the rate charged for each film, and the “inventory” table acts as a bridge to the “rental” table, which can tell me how many times a film was rented.

4b. The “language” table tells me the language and the “film” table tell me what language each film is in.

