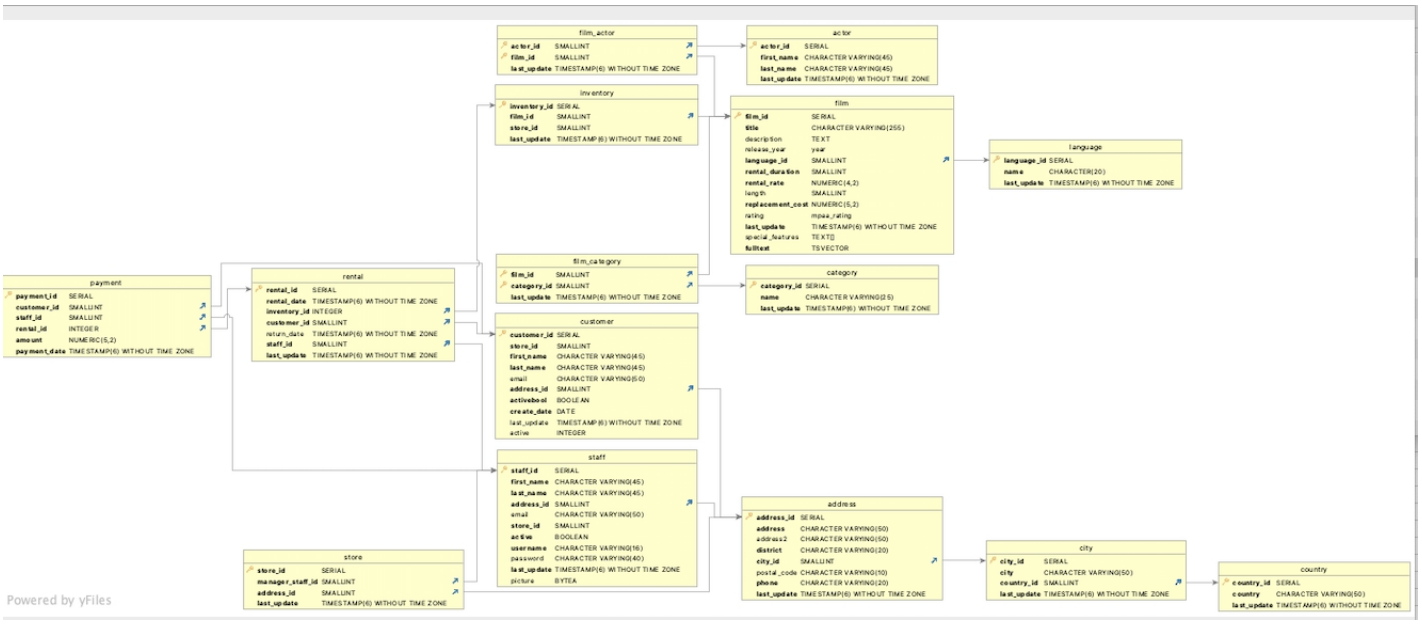
Task 3.2



3a. The ERD above is a Snowflake schema because it includes sub-dimensions (for example city and country

Fact Tables

Payment		
Columns	Data Type	Description
payment_id	SERIAL	Primary key for payment records. Identity increment for payment
customer_id	SMALLINT	Identity increment for customers
staff_id	SMALLINT	Identity increment for staff
rental_	INTEGER	Identity increment for film rental
amount	NUMERIC (5,2)	Monetary amount of payment
payment_date	TIMESTAMP (6) WITHOUT TIME ZONE	Date/time of payment

Film_Category		
Columns	Data Type	Description
film_id	SERIAL	Primary key for film records. Identity increment for film
category_id	SMALLINT	Candidate key for film records. Identity increment for film category
last_update	SERIAL	Date/time film last updated

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Store		
Columns	Data Type	Description
store_id	SERIAL	Primary key for store records. Identity increment for store
manager_staff_id	SMALLINT	Identity increment for manager & staff at store
address_id	SMALLINT	Identity increment for store's address
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date/time store last updated

FILM_ACTOR		
Columns	Data Type	Description
actor_id	SMALLINT	Primary key for actor records. Identity increment for actor
film_id	SMALLINT	Candidate key for actor records. Identity increment for film category
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date/time actor last updated

Dimension

RENTAL		
Columns	Data Type	Description
Rental_id	SERIAL	Primary key for rental records. Identity increment for rental
Rental_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date/time of rental
Inventory_id	INTEGER	Identity increment for inventory
Customer_id	SMALLINT	Identity increment for customer
Return_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date/time of return
Staff_id	SMALLINT	Identity increment for staff
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date/time rental last updated

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CUSTOMER		
Columns	Data Type	Description
Customer_id	SERIAL	Primary key for customer records. Identity increment for customer
Store_id	SMALLINT	Identity increment for store
First_name	CHARACTER VARYING (45)	Customer's first name
Last_name	CHARACTER VARYING (45)	Customer's last name
Email	CHARACTER VARYING (45)	Customer's email
Address_id	SMALLINT	Identity increment for customer's address
Activebool	BOOLEAN	True or False confirming whether customer active or not in system
Create_date	DATE	Date/time customer created in system
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date/time customer's profile last updated
active	INTEGER	0 or 1 integer for whether customer is active or not

ADDRESS		
Columns	Data Type	Description
address_id	SERIAL	Primary key for address records. Identity increment for address
address	CHARACTER VARYING(50)	First line of address
Address2	CHARACTER VARYING(50)	Second line of address
District	CHARACTER VARYING(20)	Address district
City_id	SMALLINT	Address city
Postal_code	CHARACTER VARYING(10)	Address postal code
phone	CHARACTER VARYING(20)	Phone number of staff
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date/time address profile last updated

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STAFF		
Columns	Data Type	Description
staff_id	SERIAL	Primary key for staff records. Identity increment for staff
First_name	CHARACTER VARYING(45)	Staff's first name
Last_name	CHARACTER VARYING(45)	Staff's last name
Address_id	SMALLINT	Identity increment for Staff's address
Email	CHARACTER VARYING(50)	Staff's email
Store_id	SMALLINT	Identity increment for store where staff is employed
Active	BOOLEAN	True or False confirming whether staff active or not in system
Username	CHARACTER VARYING(40)	Staff's username
password	CHARACTER VARYING(40)	Staff's password
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date/time Staff's profile last updated
Picture	BYTEA	Staff's picture

CITY		
Columns	Data Type	Description
city_id	SERIAL	Primary key for city records. Identity increment for city
city	CHARACTER VARYING(50)	Name of city
Country_id	SMALLINT	Identity increment for country
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date/time city last updated

ACTOR		
Columns	Data Type	Description
actor_id	SERIAL	Primary key for actor records. Identity increment for actor
First_name	CHARACTER VARYING(45)	Actor's first name
Last_name	CHARACTER VARYING(45)	Actor's last name
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date/time actor last updated

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FILM		
Columns	Data Type	Description
film_id	SERIAL	Primary key for film records. Identity increment for film
title	CHARACTER VARYING(255)	Title of film
description	TEXT	Description of film
Release_year	year	Release year of film
Language_id	SMALLINT	Language of film
Rental_duration	SMALLINT	Rental duration of film
Rental_rate	NUMERIC(4,2)	Rental rate of film
length	SMALLINT	Length of film
Replacement_cost	NUMERIC(5,2)	Replacement cost of film
rating	Mpaa_rating	Rating of film
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date/time film's profile last updated
Special_features	TEXT[]	Description of what special features are included (Trailers, Behind the scenes, etc...)
fulltext	TSVECTOR	Keywords associated with film

COUNTRY		
Columns	Data Type	Description
country_id	SERIAL	Primary key for country records. Identity increment for country
Country	CHARACTER VARYING(50)	Name of country
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date/time country last updated

INVENTORY		
Columns	Data Type	Description
inventory_id	SERIAL	Primary key for inventory records. Identity increment for inventory
Film_id	SMALLINT	Identity increment for film
Store_id	SMALLINT	Identity increment for store

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last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date/time inventory last updated

LANGUAGE		
Columns	Data Type	Description
language_id	SERIAL	Primary key for language records. Identity increment for language
name	CHARACTER(20)	Name of language
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date/time language last updated

CATEGORY		
Columns	Data Type	Description
category_id	SERIAL	Primary key for category records. Identity increment for category
name	CHARACTER(25)	Name of category
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date entry was last updated

4a. Which actors brought Rockbuster the most revenue? – To answer this question, I would need the actor, film_actor, inventory, rental and payment

4b. What language are the majority of movies in the collection? – To answer this question, I would need the film, language and Inventory