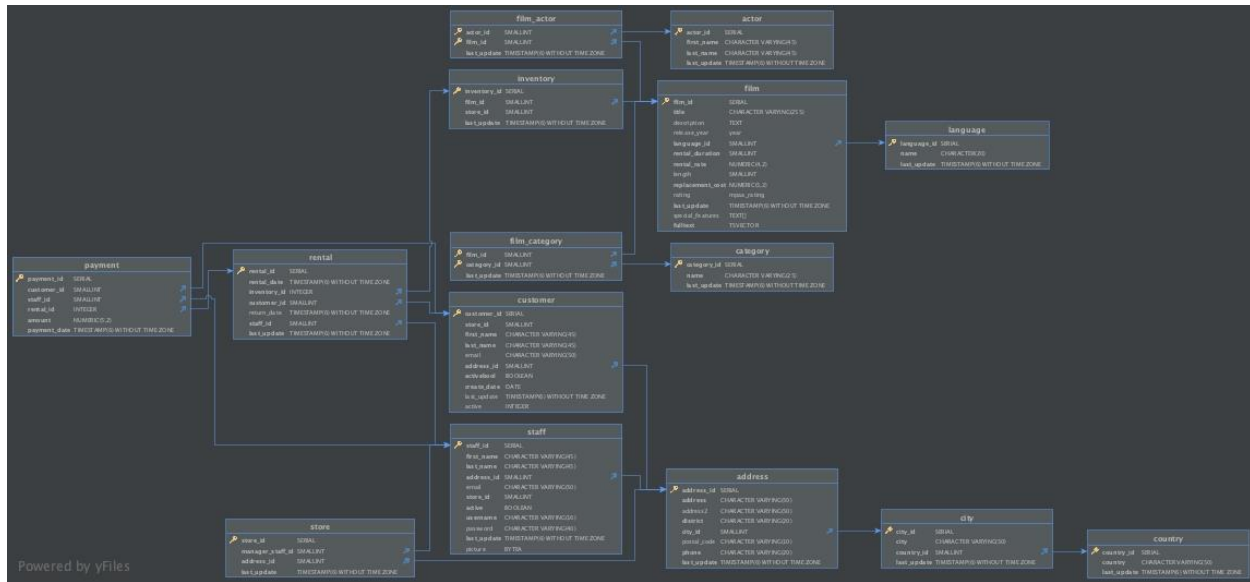Answers 3.2

Part 3

A) The ERD above has a star schema you can tell it is a star schema because there is no central point that each data base is connecting to, you can also tell from the tables in the bottom right of the graph how they branch off each other.
B) Fact tables and Dimensions

Payment

payment_ID	Serial	The cards payment information
customer_ID	SMALLINT	Customers ID number
staff_ID	SMALLINT	Staff member that helped customer
rental_ID	INTEGER	Number referring to the item being rented
amount	NUMERIC(5,2)	Amount of purchase
payment_date	TIMESTAMP(6) WITHOUT TIME ZONE	Day the transaction took place

Rental

rental_id	SERIAL	Refers to the item being rented
rental_Date	TIMESTAMP(6) WITHOUT TIME ZONE	Mm/dd/yy
inventory_id	INTEGER	Number of the copy that was rented
customer_id	SMALLINT	Customers number ID
return_date	TIMESTAMP(6) WITHOUT TIME ZONE	Day the movie was retuned
staff_id	SMALLINT	Id of the staff member
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	When the item was updated in the system as in stock

Store

Store_id	Serial	Number that corresponds to store
Manager_staff_id	SMALLINT	Managers number ID
Address_id	SMALLINT	The address of the store in numbers
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Time the store opens

Film_actor

Actor_id	SMALLINT	Number corresponding to an actor
Film_id	SMALLINT	Number corresponding to a film
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date movie was made

Inventory

Inventory_id	SERIAL	Number that refers to the inventory
Film_id	SMALLINT	Number that refers to the film
Store_id	SMALLINT	Number that refers to the store
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last updated

Film_Category

Film_id	SMALLINT	Number that refers to the film
Category_id	SMALLINT	Number that refers to the category
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last updated

Customer

Customer_id	SERIAL	Number that refers to the customer
Store_id	SMALLINT	Number that refers to the store
First_name	CHARACTER VARYING (45)	First name of customer
Last_name	CHARACTER VARYING (45)	Last name of customer
Email	CHARACTER VARYING (45)	Email address
Address_id	SMALLINT	Number relating to address of customer
Activebool	BOOLEAN	True or false
Create_date	DATE	Date that the entry customer was created
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update
Active	INTEGER	Is the customer active

Staff

Staff_id	SERIAL	Number referring to staff member
First_name	CHARACTER VARING(45)	First name
Last_name	CHARACTER VARING(45)	Last name
Address_id	SMALLINT	Address number
Email	CHARACTER VARING(50)	Email address
Store_id	SMALLINT	Number referring to store
Active	BOOLEAN	True or false
Username	CHARACTER VARING(16)	User name for employee login
Password	CHARACTER VARING(40)	Password for employee login
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update
Picture	BYTEA	Employee picture

Actor

Actor_id	Serial	Number referring to the actor
First_name	CHARACTER VARYING(45)	First name of actor
Last_name	CHARACTER VARYING(45)	Last name of actor
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update

Film

Film_id	SERIAL	Number referring to film
Title	CHARACTER VARYING(255)	Title of film
Description	TEXT	Description of film
Release_year	YEAR	What year movie was released
Language_id	SMALLINT	Number referring to language of movie
Rental_duration	SMALLINT	Length of movie rental
Rental_rate	NUMERIC(4,2)	Price to rent the movie
Length	SMALLINT	How long the movie is
Replacement_cost	NUMERIC(5,2)	Cost to replace the movie
rating	Mpaa_rating	
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update
Special_features	TEXT[]	Special features about the in the movie like bonus scenes
Fulltext	TSVECTOR	Full text

Category

Category_id	SERIAL	Number referring to category
Name	CHARACTER VARYING(25)	Name of category
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update

City

City_id	SERIAL	Number referring to city
City	CHARACTER VARYING(50)	Name of city
Country_id	SMALLINT	Id referring to country
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update

Country

Country_id	Serial	Number referring to country
Country	CHARACTER VARYING(50)	Name of country
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update

Language

Language_id	SERIAL	Number referring to language
Name	CHARACTER(20)	Name of language
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update

4a) you would need the actor table and rental table.
4b) you would need the language table and film table