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Course name: SQL and Databases  
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Instruction: Use the same movies dataset

Question:

1. We will need a list of all staff members, including their first and last names, email addresses, and the store identification number where they work.

```
SELECT concat(first_name, ' ', last_name) as 'Name', email, store_id as 'Store id' from staff
```

|   | Name         | email                        | Store id |
|---|--------------|------------------------------|----------|
| ▶ | Mike Hillyer | Mike.Hillyer@sakilastaff.com | 1        |
|   | Jon Stephens | Jon.Stephens@sakilastaff.com | 2        |

2. We will need separate counts of inventory items held at each of your two stores.

```
select store_id, count(*) as 'Count of Inventory' from inventory GROUP BY store_id;
```

|   | store_id | Count of Inventory |
|---|----------|--------------------|
| ▶ | 1        | 2270               |
|   | 2        | 2311               |

3. We will need a count of active customers for each of your stores. Separately, please.

```
select store_id, COUNT(*) as 'Total Active Customer' from customer where active = 1 group by store_id;
```

|   | store_id | Total Active Customer |
|---|----------|-----------------------|
| ▶ | 1        | 318                   |
|   | 2        | 266                   |

4. To assess the liability of a data breach, we will need you to provide a count of all customer email addresses stored in the database.

```
SELECT COUNT(email) as "Total Email in Database" from customer
```

|   | Total Email in Database |
|---|-------------------------|
| ▶ | 599                     |

5. We are interested in how diverse your film offering is as a means of understanding how likely you are to keep customers engaged in the future. Please provide a count of unique film titles you have in inventory at each store and then provide a count of the unique categories of films you provide.

```
SELECT store_id, count(DISTINCT film_id) as 'Unique Film' from inventory group by store_id;
```

|   | store_id | Unique Film |
|---|----------|-------------|
| ▶ | 1        | 759         |
|   | 2        | 762         |

```
SELECT inventory.store_id as 'STORE', COUNT(distinct category.name) as 'Unique Category' from film_category
JOIN category ON film_category.category_id = category.category_id
JOIN inventory ON film_category.film_id = inventory.film_id
group by inventory.store_id
```

|   | STORE | Unique Category |
|---|-------|-----------------|
| ▶ | 1     | 16              |
|   | 2     | 16              |

6. We would like to understand the replacement cost of your films. Please provide the replacement cost for the film that is least expensive to replace, the most expensive to replace, and the average of all films you carry.

```
#Least Expensice to replace
SELECT title, replacement_cost from film order by replacement_cost ASC limit 1;
```

|   | title                | replacement_cost |
|---|----------------------|------------------|
| ▶ | ANACONDA CONFESSIONS | 9.99             |

```
#Most Expensice to replace
SELECT title, replacement_cost from film order by replacement_cost DESC limit 1;
```

|  |
|--|
|  |
|--|




7. We are interested in having you put payment monitoring systems and maximum payment processing restrictions in place to minimize the future risk of fraud by your staff. Please provide the average payment you process, as well as the maximum payment you have processed.









8. We would like to better understand what your customer base looks like. Please provide a list of all customer identification values, with a count of rentals they have made all-time, with your highest volume customers at the top of the list.





9. We want to come by each of the stores in person and meet the managers. Please send over the managers' names at each store, with the full address of each property (street address, district, city, and country please).





10. We would like to get a better understanding of all the inventory that would come along with the business. Please pull together a list of each inventory item you have stocked, including the store\_id number, the inventory\_id, the name of the film, the film's rating, its rental rate and replacement cost.



11. From the same list of films, you just pulled, please roll that data up and provide a summary level overview of your inventory. We would like to know how many inventory items you have with each rating at each store.



12. Similarly, we want to understand how diversified the inventory is in terms of replacement cost. We want to see how big of a hit it would be if a certain category of film became

unpopular at a certain store. We would like to see the number of films, as well as the average replacement cost, and total replacement cost, sliced by store and film category.



13. We want to make sure you folks have a good handle on who your customers are. Please provide a list of all customer names, which store they go to, whether they are currently active, and their full addresses – street address, city, and country.





14. We would like to understand how much your customers are spending with you, and to know who your most valuable customers are. Please pull together a list of customer names, their total lifetime rentals, and the sum of all payments you have collected from them. It would be great to see this ordered on total lifetime value, with the most valuable customers at the top of the list.



15. We would like to get to know your board of advisors and any current investors. Could you please provide a list of advisor and investor names in one table? Could you please note whether they are an investor or an advisor, and for the investors, it would be good to include which company they work with.





16. We're interested in how well you have covered the most-awarded actors. Of all the actors with three types of awards, for what % of them do we carry a film? And how about for actors with two types of awards? Same questions. Finally, how about actors with just one award?

