

## I.

1. Write a query to select all the columns from the table “costumer” in the database named dvdrental.
2. Write a query to display the names (first\_name, last\_name) using an alias name full name.
3. You want to know every date where one or several accounts were created. Write a query to select the dates of creation from the customer table, it should not have duplicates.
4. Write a query to get the details of all customers from the customer table in descending order by their first name.
5. Write a query to get the film ID, title, description, year of release and rental rate in ascending order according to their rental rate.
6. Write a query to get the address, the district and the phone number from the customers leaving in the district Texas in the address table.
7. Write a query to retrieve the details of the movies with the id 15 and 150.
8. Pick your favourite movie. Write a query to see if the rental shop owns it. Write a query to get the film ID, the title, the description, the length and the rental rate from the film table for your movie title.
9. Didn't find it ? Maybe you made a mistake in the name. Write a query to get the film ID, the title, the description, the length and the rental rate from the film table for all the movies starting with the two first letters of your movie.
10. You want to have a choice between ten propositions of movies and you want the cheapest ones. Write a query to find the 10th cheapest movies.
11. You are not satisfied with the results. Write a query to find the 10th next cheapest movies. Try to not use LIMIT.

**BONUS.** Classify. How can you produce a list of movies, with each labelled as 'cheap' or 'expensive' depending on if their rental rate is more than 2nis? Return 2 columns: the title and the rental rate as “cost” of the movies in question.

## **II.**

12. Write a query to join the data of the customer table and the payment table. You want to get the amount and the date of every payment made by a customer, ordered by his id (from 1 to...).

13. You want to be assured of the performance of your sellers. Write a query to get the customer's id, names (first and last), the amount and the date of payment ordered by the id of the staff who sold them the dvd.

14. You need to check your inventory. Write a query to get all the movies which are not in the inventory.

15. Write a query to find which city is in which country.

## **III.**

**16.** Update the column “last\_update” of the table category to default if the values are null.

17. Update the last update date of the address on the last update of the customer.

18. Some movies need a warning about the age limit suggested. Change a column in the film table to display this warning: “not available for children under 13” when the rating is PG-13. Try to do it so you can see what movie is concerned.

19. Write a SQL statement to insert 3 countries inside the country table by a single insert statement. Give them an id and a name.

20. Write a SQL statement to add a column region\_id to the table country.

21. Write a SQL statement to change the data type of the column region\_id to text in the table country.

22. Write a SQL statement to drop the existing foreign key fk\_city from city table. Don't forget to refresh if you want to see the update. You can see the primary and foreign keys into "constraints".

23. Delete the first country you created above.

#### **IV.**

24. Find the total number of members who have made at least one booking.

25. calculate the total amount paid by each customer.

26. Calculate the customers who paid more than 179nis.

27. Calculate the number of payments by the customer.

28. Write a query to find the number of movies available in the inventory table.

29. Write a query to get the highest, lowest, total, and average amount of all payment.

If you want to go further, get harder exercises on this website:

<https://pgexercises.com/gettingstarted.html>.