Apply filters to SQL queries

Project description

In this project, I obtain specific information about employees in the database using SQL queries. In this task I retrieved all failed login attempts after business hours. Then, I retrieved all login attempts that occurred on specific dates. Afterwards, I retrieved the logins that didn't originate in Mexico. I proceeded to retrieve information about certain employees in the Marketing department. Immediately after, I retrieved information about employees in the Finance or the Sales department. For the final input, I retrieved information about employees who are not in the Information Technology department.

Retrieve after hours failed login attempts

The input filter needed in the login_time column was the (>) symbol to find out the number of failed login attempts that occurred after hours. In this project, the time was 18:00 which is 6pm. The success column contains the value of TRUE and FALSE. Failed indicated a failed login attempt. There were 19 failed login attempts.

Retrieve login attempts on specific dates

The filter needed to find the login attempted on the specific dates is the (OR) filter. Using OR, I was able to filter out the login attempts between May 8th and May 9th of 2022. There was a total of 75 attempts made on these two dates.

Retrieve login attempts outside of Mexico

The LIKE and % filters were used to find this information. To find the login attempts made outside of Mexico, I filtered the database to give me the login attempts of every country except Mexico. I used MEX% to be the most accurate as the table uses the MEX abbreviation when listing that country.

Retrieve employees in Marketing

The number of employees in Marketing was retrieved from the departments column. In this exercise. The number of employees in the EAST office was needed, so another filter was combined on the last line of the input. I used the AND and LIKE filters on the office column to find the information needed.

Retrieve employees in Finance or Sales

The OR filter was again used to find the employees in the Finance and Sales departments.

Retrieve all employees not in IT

The NOT filter was used to find the employees that are not in the Information Technology department. The NOT filter is a little trick when inputting as it is put before the column rather than after the column like all the other filters. The result was a list of all the other departments and which employees were in that specific department.

Summary

The project I completed is a showcase of my expertise on using SQL and applying filters to retrieve the information needed. I used the AND, OR, LIKE, % and NOT filters to complete the task. The inputs and and data outputs are recorded in the screenshots shown.