# Apply filters to SQL queries

## Project description

I leveraged SQL to investigate potential security incidents within the organization's data. By applying SQL filters, I retrieved specific records from the employees and log\_in\_attempts tables to uncover security anomalies and address them effectively.

## Retrieve after hours failed login attempts

I utilized SQL to query the log\_in\_attempts table and identify all failed login attempts that occurred after 18:00. This query helps pinpoint potential security breaches during non-standard login hours.

SELECT \*

FROM log\_in\_attempts

WHERE login\_time > '18:00:00' AND success = 0;

## Retrieve login attempts on specific dates

I crafted an SQL query to retrieve all login attempts on specific dates, particularly on '2022-05-09' and '2022-05-08'. This query facilitates the investigation of security incidents on these two crucial days.

SELECT \*

FROM log\_in\_attempts

WHERE login\_date IN ('2022-05-09', '2022-05-08');

## Retrieve login attempts outside of Mexico

To identify login attempts originating outside of Mexico, I designed an SQL query that filters out records where the country column does not match 'MEX%' to account for variations like 'MEX' and 'MEXICO'.

SELECT \*

FROM log\_in\_attempts

WHERE country NOT LIKE 'MEX%';

## Retrieve employees in Marketing

I utilized SQL to extract employee records from the employees table who belong to the Marketing department and work in offices within the East building.

SELECT \*

FROM employees

WHERE department = 'Marketing' AND office LIKE 'East-%';

## Retrieve employees in Finance or Sales

To gather data on employees in the Finance or Sales departments, I employed SQL to filter records based on department.

SELECT \*

FROM employees

WHERE department IN ('Finance', 'Sales');

## Retrieve all employees not in IT

I crafted an SQL query to identify employees who are not part of the Information Technology (IT) department.

SELECT \*

FROM employees

WHERE NOT department = 'Information Technology';

## Summary

Throughout this project, I harnessed SQL to investigate potential security concerns within the organization's data. By retrieving and analyzing specific records, I contributed to enhancing the system's security posture and mitigating potential risks.