# Apply filters to SQL queries

## Project description

Simulated work using SQL to determine login attempts and user populations that need to be scheduled for OS patching.

## Retrieve after hours failed login attempts

You recently discovered a potential security incident that occurred after business hours. To investigate this, you need to query the **log\_in\_attempts** table and review after hours login activity (after 18:00)

SELECT \*

FROM log\_in\_attempts

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

This query returns any failed login attempts after 6PM.

## Retrieve login attempts on specific dates

A suspicious event occurred on 2022-05-09. To investigate this event, you want to review all login attempts which occurred on this day and the day before (2022-05-09 or 2022-05-08).

SELECT \*

FROM log\_in\_attempts

WHERE login\_date = '2022-05-08' OR login\_date = '2022-05-09';

This query returns all login attempt for the 8th and 9th of June

## Retrieve login attempts outside of Mexico

There’s been suspicious activity with login attempts, but the team has determined that this activity didn't originate in Mexico. Now, you need to investigate login attempts that occurred outside of Mexico. (When referring to Mexico, the **country** column contains values of both **MEX** and **MEXICO.**

SELECT \*

FROM log\_in\_attempts

WHERE NOT country like 'MEX%'

This query returns all login attempts that do not originate in Mexico. It takes into account for variations of Mexico in the country column.

## Retrieve employees in Marketing

Your team wants to perform security updates on specific employee machines in the Marketing department. Filter all employees in the Marketing department for all offices in the East building(s).

SELECT \*

FROM employees

where office like 'East%' AND department = 'Marketing';

This query returns all Marketing employees that have an office in one of the ‘East’ buildings.

## Retrieve employees in Finance or Sales

Your team now needs to perform a different security update on machines for employees in the Sales and Finance departments.

SELECT \*

FROM employees

where department = 'Sales' AND department = 'Finance';

This query pulls all the employees that are listed as Sales or Finance in the department column

## Retrieve all employees not in IT

Your team needs to make one more update to employee machines. The employees who are in the Information Technology department already had this update, but employees in all other departments need it

SELECT \*

FROM employees

WHERE NOT department = 'Information Technology';

This query excludes all Information Technology employees.

## Summary

Completed SQL queries using filters to find specific sets of data for OS patching and login activity.