# *APPLY FILTERS TO SQL QUERIES*

## Project Description

As a security analyst, I use SQL to investigate security issues by filtering login attempts and employee data. This project demonstrates my ability to use AND, OR, NOT, and LIKE operators to extract meaningful data for security investigations. The goal is to identify unauthorized access attempts and gather relevant employee information for system updates.

## Retrieve After-Hours Failed Login Attempts

### SQL Query:

SELECT \*  
FROM log\_in\_attempts  
WHERE login\_time > '18:00' AND success = 0;

### Explanation:

- Retrieves login attempts after 6 PM (18:00).  
- Filters for failed attempts (success = 0).  
- Helps identify suspicious activity outside business hours.

## Retrieve Login Attempts on Specific Dates

### SQL Query:

SELECT \*  
FROM log\_in\_attempts  
WHERE login\_date = '2022-05-08' OR login\_date = '2022-05-09';

### Explanation:

- Filters for all login attempts on May 8 and May 9, 2022.  
- Uses OR to match multiple dates.  
- Helps analyze suspicious activity from those days.

## Retrieve Login Attempts Outside of Mexico

### SQL Query:

SELECT \*  
FROM log\_in\_attempts  
WHERE NOT country LIKE 'MEX%';

### Explanation:

- Uses LIKE 'MEX%' to match 'MEX' or 'MEXICO'.  
- Uses NOT to exclude these records.  
- Helps analyze suspicious logins from other countries.

## Retrieve Employees in Marketing (East Building Only)

### SQL Query:

SELECT \*  
FROM employees  
WHERE department = 'Marketing' AND office LIKE 'East-%';

### Explanation:

- Retrieves Marketing employees.  
- Uses LIKE 'East-%' to match all offices in the East building.  
- Helps update employee machines in a specific location.

## Retrieve Employees in Finance or Sales

### SQL Query:

SELECT \*  
FROM employees  
WHERE department = 'Finance' OR department = 'Sales';

### Explanation:

- Retrieves Finance and Sales employees.  
- Uses OR to select multiple departments.

## Retrieve All Employees Not in IT

### SQL Query:

SELECT \*  
FROM employees  
WHERE NOT department = 'Information Technology';

### Explanation:

- Uses NOT to exclude IT department employees.  
- Ensures only employees outside IT receive the update.

## Summary

This project demonstrates my ability to filter login attempts and employee data using SQL. By applying AND, OR, NOT, and LIKE operators, I extracted key security insights, such as detecting failed login attempts, tracking suspicious activity, and managing employee updates. These SQL skills are essential for security investigations and IT asset management.