# Apply filters to SQL queries

## Project description

Using SQL with filters allow for a more complex and thorough search of databases.

## Retrieve after hours failed login attempts

This SQL query pulls filtered data from the log\_in\_attempts database. The first filter [login\_time > ’18:00’] checks for if the login was made after office hours, and the second filter [success = 0] checks if the login attempt was unsuccessful. The AND operator requires both of these statements to be true before returning the data.

## Retrieve login attempts on specific dates

This query checks whether the login\_date of the row is ‘2022-05-08’ or ‘2022-05-09’ and then returns the data if the date matches either filter.

## Retrieve login attempts outside of Mexico

This query uses the LIKE term instead of =, which is used to search for terms that match part of the keyword. In this instance, ‘MEX%’ is used to search for anything that begins with ‘MEX’, including MEX and MEXICO. The NOT operator is also used to search for everything that does not match the filter.

## Retrieve employees in Marketing

This query combines terms we have already used to create a complex search. This search returns the row if the department is equal to ‘Marketing’ and the office building begins with ‘East-‘ (which will return all Marketers in the east buildings).

## Retrieve employees in Finance or Sales

This query selects all rows where the department is equal to ‘Sales’ or ‘Finance’.

## Retrieve all employees not in IT

This query returns all rows where the department is not ‘Information Technology’.

## Summary

In summary, using filters can help SQL queries be more precise to the desired output. Operators such as AND, OR, and NOT can really help narrow down a search. Using LIKE when results are not exact is very helpful.