

# Apply filters to SQL queries

## Project description

In this scenario, there seems to have been a security breach during business hours, and I was tasked with using SQL queries to check the after hours login activity.

## Retrieve after hours failed login attempts

```
select * from log_in_attempts where success = FALSE and login_time > "18:00";
```

This line of code will select all columns from the log\_in\_attempts table, and only present the entries that have the login time greater than 18:00 and where the login attempt was unsuccessful.

## Retrieve login attempts on specific dates

```
select * from log_in_attempts where login_date = "2022-05-09" or login_date = "2022-05-08";
```

This code will select all the columns from the log\_in\_attempts table, and only return the entries where the login date is 2022-05-09 or 2022-05-08.

## Retrieve login attempts outside of Mexico

```
SELECT * FROM log_in_attempts WHERE NOT country LIKE 'MEX%';
```

This line of code will do the same as above, but will only return all entries that do not contain the "MEX". The % is a wildcard indicating that there will be characters after the string.

## Retrieve employees in Marketing

```
SELECT * FROM employees where department = "Marketing" and office LIKE "East%";
```

This will select all columns from the employees table and return only the entries where their department is Marketing and the office is in the east.

## Retrieve employees in Finance or Sales

```
SELECT * FROM employees where department = "Finance" OR department = "Sales";
```

This will select all columns from the employees table and only return the entries where the department is Finance or Sales.

## Retrieve all employees not in IT

```
SELECT * FROM employees where NOT department = "Information  
Technology";
```

This will select all columns from the employees table and only return the entries where the department is not IT.

## Summary

Each of these scenarios help with the understanding on how to query a database. These operators help with narrowing down searches and finding information that is useful to the user.