

# Apply filters to SQL queries

By Jovworie Tanshi

## Project description

**Objective:** Utilize SQL queries to investigate and retrieve specific information related to security issues involving login attempts and employee data.

## Retrieve after hours failed login attempts

**Task:** Identify failed login attempts occurring after business hours.

**SQL Query:**

```
SELECT *  
FROM log_in_attempts  
WHERE TIME(login_time) > '18:00:00' AND success = 0;
```

## Retrieve login attempts on specific dates

**Task:** Investigate login attempts on specific dates ('2022-05-08' and '2022-05-09').

**SQL Query:**

```
SELECT *  
FROM log_in_attempts  
WHERE login_date IN ('2022-05-08', '2022-05-09');
```

## Retrieve login attempts outside of Mexico

**Task:** Find login attempts that did not originate in Mexico ('MEX' or 'MEXICO').

**SQL Query:**

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

## Retrieve employees in Marketing

**Task:** Retrieve information about employees in the Marketing department.

**SQL Query:**

```
SELECT e.employee_id, e.employee_name, d.department_name
FROM employees e
JOIN departments d ON e.department_id = d.department_id
WHERE d.department_name = 'Marketing';
```

## Retrieve employees in Finance or Sales

**Task:** Retrieve information about employees in the Finance or Sales departments.

**SQL Query:**

```
SELECT e.employee_id, e.employee_name, d.department_name
FROM employees e
JOIN departments d ON e.department_id = d.department_id
WHERE d.department_name IN ('Finance', 'Sales');
```

## Retrieve all employees not in IT

**Task:** Obtain information about employees who are not in the Information Technology department.

**SQL Query:**

```
SELECT e.employee_id, e.employee_name, d.department_name
FROM employees e
JOIN departments d ON e.department_id = d.department_id
WHERE d.department_name != 'Information Technology';
```

## Summary

### Summary

This project involves using SQL queries to:

- Investigate failed login attempts after business hours.

- Analyze login attempts on specific dates.
- Identify login attempts originating outside of Mexico.
- Retrieve employee information based on departmental criteria.

Each query is designed to extract specific data relevant to investigating potential security issues and understanding employee data across different departments.