Apply filters to SQL queries

Project description

There are some potential security risks involving login attempts and employee machines. My task is to examine the organization's data using SQL queries to retrieve records from different datasets and investigate the potential threats.

Retrieve after hours failed login attempts

```
MariaDB [organization]> SELECT *
    -> FROM log_in_attempts
    -> WHERE login_time > '18:00' AND success = 'FALSE'
    -> ORDER BY login_time;
```

This query works by selecting all the log_in_attempts data, and then filtering it to only show the login attempts made after hours that also failed. The results are then ordered by their login time

Retrieve login attempts on specific dates

```
MariaDB [organization]> SELECT *
    -> FROM log_in_attempts
    -> WHERE login_date = '2022-05-09' OR login_date = '2022-05-08'
    -> ORDER BY login_date, login_time;
```

This query works by selecting all the log_in_attempts data, and then filtering it to only show the login attempts made on the specified dates. The results are then ordered by their login time and day to show the progressive attempts made

Retrieve login attempts outside of Mexico

```
MariaDB [organization]> SELECT *
    -> FROM log_in_attempts
    -> WHERE NOT country LIKE 'MEX%'
    -> ORDER BY country, login_time;
```

This query works by selecting all the log_in_attempts data, and then filtering it to only show the login attempts made outside of Mexico. The results are then ordered by their login time and country for ease of reading the data

Retrieve employees in Marketing

```
MariaDB [organization]> SELECT *
    -> FROM employees
    -> WHERE department = 'Marketing' AND office LIKE 'EAST%'
    -> ORDER BY office;
```

This query works by selecting all the employees data, and then filtering it to only show those who belong to the Marketing department and have an office in the East building. The query then orders by the floor level in the building

Retrieve employees in Finance or Sales

```
MariaDB [organization]> SELECT *
    -> FROM employees
    -> WHERE department = 'Finance' OR department = 'Sales'
    -> ORDER BY department;
```

This query works by selecting all the employees data, and then filtering it to only show those who belong to the Finance and Sales departments. Further, the query orders the results based on the department

Retrieve all employees not in IT

```
MariaDB [organization]> SELECT *
    -> FROM employees
    -> WHERE NOT department = 'Information Technology'
    -> ORDER BY department;
```

This query works by selecting all the employees data, and then filtering it to show those who aren't in the Information Technology department. The query then orders the data based on the other departments

Summary

The activities above demonstrate the skills learned on how to filter data using SQL. It demonstrates how to filter different data tables using different and multiple operators.