Apply filters to SQL queries

Project description

In this lab, I was required to do a search and apply filters to monitor for after-hours suspicious activities where some actor tried to log in and had failed attempts after hours.

Retrieve after-hours failed login attempts

```
MariaDB [organization]> SELECT *
    -> FROM log_in_attempts
    -> WHERE login_time > '18:00' AND success = 0;
```

Using this query I was able to retrieve failed login attempts after 6 pm using the logical operator 'AND'.

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';
```

Using this query I was able to retrieve login attempts on the dates 2022-05-09 and 2022-05-09 by using the logical operator 'OR'

Retrieve login attempts outside of Mexico

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

Using this query I was able to find login attempts from countries that are not Mexico. Additionally, using the wildcard '%' allows me to search the database in case Mexico was not written in full and was written "MEX".

Retrieve employees in Marketing

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

Using this query I was able to find data about employees from the Marketing department and their office was in the south.

Retrieve employees in Finance or Sales

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

Using this query I was able to get the data of employees who were in Finance or Sales.

Retrieve all employees not in IT

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

Using this query I was able to get the date of all the employees who are not in IT.

Summary

SQL queries are an amazing tool to get data accurately and efficiently, and I have enjoyed learning it. Overall through the use of multiple filter operators, I was able to efficiently track the user who logged in after hours and get all his data.