**Project Description**

In this project, I investigated potential security incidents by querying the login\_attempts and employees tables to identify failed login attempts, suspicious activities, and employee information. This involved using SQL filters to retrieve and analyze data based on specific criteria, such as time, date, department, and location.

**1. Retrieve after hours failed login attempts**

**Query:**

SELECT \*

FROM login\_attempts

WHERE login\_time > '18:00:00' AND success = 0;

**Description:** This query retrieves all failed login attempts (where success is 0) that occurred after 18:00:00 (6 PM). It filters records from the login\_attempts table based on the login\_time and success columns.

**2. Retrieve login attempts on specific dates**

**Query:**

SELECT \*

FROM login\_attempts

WHERE login\_date IN ('2022-05-08', '2022-05-09');

**Description:** This query retrieves login attempts from May 8, 2022, and May 9, 2022. It filters records from the login\_attempts table where the login\_date matches either of the specified dates.

**3. Retrieve login attempts outside of Mexico**

**Query:**

SELECT \*

FROM login\_attempts

WHERE country NOT LIKE '%MEX%';

**Description:** This query returns login attempts from countries outside of Mexico. It uses the NOT LIKE operator with %MEX% to exclude records where the country column contains 'MEX' or 'MEXICO'.

**4. Retrieve employees in the Marketing department in the East building**

**Query:**

SELECT \*

FROM employees

WHERE department LIKE '%Marketing%' AND office LIKE 'East%';

**Description:** This query selects employees who are in the Marketing department and work in offices located in the East building. It uses the LIKE operator with % to match any department containing 'Marketing' and any office starting with 'East'.

**5. Retrieve employees in Sales or Finance departments**

**Query:**

SELECT \*

FROM employees

WHERE department LIKE '%Sales%' OR department LIKE '%Finance%';

**Description:** This query retrieves employees who are in either the Sales or Finance departments. It uses the OR operator to include records where the department column contains 'Sales' or 'Finance'.

**6. Retrieve all employees not in IT department**

**Query:**

SELECT \*

FROM employees

WHERE department NOT LIKE '%Information Technology%';

**Description:** This query retrieves all employees who are not in the Information Technology (IT) department. It uses the NOT LIKE operator to exclude records where the department column contains 'Information Technology'.

**Summary**

This project involved filtering data from the login\_attempts and employees tables to address security concerns and operational needs. The queries provided insights into after-hours login attempts, login activity on specific dates, and employee details across different departments and locations. By applying SQL filters, I was able to efficiently retrieve and analyze relevant data to support security investigations and departmental management.