Apply filters to SQL queries

Project description

[My organization is working to make their system more secure. It is my job to ensure the system is safe, investigate all potential security issues, and update employee computers as needed. The following steps provide examples of how I used SQL with filters to perform security-related tasks..]

Retrieve after hours failed login attempts

[First, I started by selecting all data from the log_in_attempts table. Then, I used a WHERE clause with an AND operator to filter my results to output only login attempts that occurred after 18:00 and were unsuccessful. The first condition is login_time > '18:00', which filters for the login attempts that occurred after 18:00. The second condition is success = FALSE, which filters for the failed login attempts..]

Retrieve login attempts on specific dates

[the log_in_attempts table. Then, I used a WHERE clause with an OR operator to filter my results to output only login attempts that occurred on either 2022-05-09 or 2022-05-08. The first condition is login_date = '2022-05-09', which filters for logins on 2022-05-09. The second condition is login_date = '2022-05-08', which filters for logins on 2022-05-08..]

Retrieve login attempts outside of Mexico

[First, I started by selecting all data from the log_in_attempts table. Then, I used a WHERE clause with NOT to filter for countries other than Mexico. I used LIKE with MEX% as the pattern to match because the dataset represents Mexico as MEX and MEXICO. The percentage sign (%) represents any number of unspecified characters when used with LIKE.]

Retrieve employees in Marketing

[. First, I started by selecting all data from the employees table. Then, I used a WHERE clause with AND I used LIKE with East% as the pattern to match because the data in the office column represents the East building with the specific office number. The first condition is the department = 'Marketing' portion, which filters for employees in the Marketing department. The second condition is the office LIKE 'East%' portion, which filters for employees in the East building.]

Retrieve employees in Finance or Sales

[First, I started by selecting all data from the employees table. Then, I used a WHERE clause with OR to filter for employees who are in the Finance and Sales departments. I used the OR

operator instead of AND because I want all employees who are in either department. The first condition is department = 'Finance', which filters for employees from the Finance department. The second condition is department = 'Sales', which filters for employees from the Sales department..]

Retrieve all employees not in IT

[First, I started by selecting all data from the employees table. Then, I used a WHERE clause with NOT to filter for employees not in this department..]

Summary

[applied filters to SQL queries to get specific information on login attempts and employee machines. I used two different tables, log_in_attempts and employees. I used the AND, OR, and NOT operators to filter for the specific information needed for each task. I also used LIKE and the percentage sign (%) wildcard to filter for patterns.]