W10 Paper: Case Study Working with Conditional Logic.

You have had a profitable ninth week at your new company. You mastered how to write outer joins.

Your boss decided to see if you now have the skills to learn how to use conditional logic inside queries and UPDATE statements. Your manager is keen to understand what you learned about how case expressions perform:

* Simple case expressions
* Searched case expressions
* Result set transformations with and without aggregation functions
* Conditional update statements
* Manage null values with conditional statements

You should return and report with a 3–5 paragraph report that clearly explains what you learned while mastering conditional logic and result set transformations in queries. This paper should qualify what you learned by experimenting with the technology.

Report:

During this week, I became familiar with simple and searched CASE expressions, where simple CASE expressions compare the values of a column with a specific set of values and return an expression. On the other hand, searched CASE expressions are more flexible, as they allow you to specify complex conditions that go beyond a simple comparison of values. In this way, multiple conditions can be set to determine which expression should be returned depending on the value of each row.

Working with result set transformations using aggregation functions, I learned how to manipulate the data to display the results in more useful ways, such as counting movie rentals per month. However, sometimes it is necessary to transform multi-row results into a single row with multiple columns, using a combination of CASE and SUM to accomplish this. This is essential when the data must be presented in a more compact and readable form, such as when columns are added for each month rather than multiple rows for each month.

Additionally, conditional update statements allow you to modify records based on specific conditions. By using the CASE expression within an UPDATE statement, you can make changes to data dynamically. Also, handling null values with conditional statements is crucial in SQL, since null values require special treatment. CASE expressions or functions such as IFNULL () can be used to handle nulls and prevent them from interfering with the results.