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Foundations of Databases & SQL Programming

Assignment07

Functions

Introduction

SQL functions are used to perform a certain type of task. Not all SQL functions perform the same task and would be used in a certain scenario. This paper will go over the different types of functions and their purposes.

When To Use s SQL UDF

A UDF function stands for User-Defined Function (UDF). SQL has built-in functions such as a count, sum, average, max, min, etc. These built-in functions will calculate and execute a specific outcome and are quite common.

However, these functions are limited to how they can be used and would not be able to accomplish certain types of goals for a user.

This is where the UDF would come into play. It's a custom function that can return either a single value or a table of values. This allows you to return specific results needed for analysis.

Types of Functions- Scalar, Inline, and Multi Statement

A scalar function allows you to use one or more variables but returns only one result. An example of this would be wanting to find the net sales on a certain product you're selling. You would need the quantity sold, price, and any type of discounts.

An inline function works similarly to a scalar function except instead of returning only one result it returns the output as a table. An example of this would be you have gyms in several cities, and you want a list of members for each gym by city. An inline function would provide be able to provide you with this information.

A multi-statement function returns a table as an output as well, however, there are some differences in how this function is used. This function can use more than one statement and the structure of the table returned must be defined by the user.

Summary

In summary, the different types of functions that can be used in SQL can provide an easier flow in calculating the type of result you want with the data available.