COMP 353 - Databases

6th Session

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CASE

Manage Conditions

The CASE expression goes through conditions and return a value when the first condition is met. Otherwise, it returns NULL value.

Example: Write a simple evaluation for the orders based on their amount (For instance: small, medium, giant).

Example: return orders that shipped to Canada (if ship to is null check customer’s country instead).

NULL FUNCTIONS

Return an alternative value if an expression is NULL

There are a null function that can deal with null values and return an alternative value if the expression be null.

Example: Get orders’ ship to value, if it be null, return Canada.

Example: Get amount of each product in the orders (totalAmount/units).

ALTER TABLE

Add, Delete, or Modify Columns

This statement is used to add, delete, or modify columns in an existing table. It, moreover, is used to add or delete various constraints on an existing table.

Example: Add City column to customers.

Example: Rename City column to CT.

Example: Drop CT column form customers.

INDEX

Access more quickly to data

Indexes are used to retrieve data from the database more quickly than otherwise. The users cannot see the indexes, why are just used to speed up queries/searches.

Example: create index on customers’ last name.

Example: create index on customers’ last name and first name.

CHECK

Check the condition on a column

Check the condition on the insertion of the data.

Example: check the age of the customers to be higher than 18 YO.

VIEWS

Virtual Tables

In SQL, a view is a virtual table based on the result-set of an sql statement. Furthermore, a view contains rows and columns, just like a real table.

Example: Create a view that selects every orders in the orders table with a amount higher than the average amount.

Any Question?