

What is a table in SQL?

A table in SQL is a structured collection of data stored in rows and columns. Where each row is a record, and each column represents an attribute of that record.

What is a schema?

Schema is collection of Tables, Stored procedures, indexes, functions and triggers. It shows database architecture and specifies relationship between various objects.

What is RDBMS?

RDBMS(Relational Database Management System) is software that stores, manages and organizes data in a structured way using tables. It follows relational model where data is stored in the form of rows and columns and relationship between tables are maintained using Primary keys, foreign keys.

EX: Oracle, Mysql, SQL Server, PostgreSQL

What is an alias?

It is a temporary name given to a table or a column in a table. Aliases are used to improve the code readability and make code more compact. An alias is used with 'As' keyword.

What is a clause?

Clause is a condition used in SQL query to filter the data to obtain the desired result. Some examples are where, having, like, and, or, order by, etc

What is group By clause?

Group by in SQL is used to arrange identical data into groups. It is used with aggregate functions like count, min, max, sum, and avg to perform calculations on each group

What is Order BY clause?

Order By clause is used to Sort the data either in ascending(default) or descending order. It helps to present data in more meaningful way.

What is the difference between GROUP BY and ORDER BY?

Group by groups similar rows together whereas Order by sorts the data in ascending or descending order.

What are Constraints in SQL?

Constraints In SQL are rules applied to table columns to maintain data Accuracy. They restrict the type of data that can be stored in a column.

What are the types of constraints in SQL?

NOT NULL: Prevents a column from storing Null Values.

UNIQUE: All values in a column are Distinct, but allows Null values.

PRIMARY KEY: Ensures Uniqueness of a column and does not allow Null values.

FOREIGN KEY: Establishes a Relationship between two tables, linking to a primary key in another table

CHECK: Ensures that all values in a column satisfy given condition.

DEFAULT: Assigns a default value if no value is provided.

What is SQL SELECT statement?

The SELECT statement retrieves data from one or more tables. It is the most commonly used command in SQL, allowing users to filter, sort and display data.

What are NULL values in SQL?

NULL represents a missing or Unknown value or Undefined data. It means that column does not contain any value and is different from zero.

What is the difference between DDL and DML commands?

DDL(Data definition Language)→ deals with table structure

Used to create,modify or delete tables.

Ex: Create,Alter,Drop

DML(Data Manipulation Language)→deals with table data

Used to insert,Update,delete data from tables.

Ex:Select,Insert,Update,Delete

What is the purpose of the ALTER command in SQL?

The ALTER command in SQL is used to Modify an existing database structure such as tables,columns,or constraints.It allows to add,modify or delete columns and constraints in a table.

What are Set Operators in SQL?

Set Operators in SQL combine the result of two or more SELECT queries and return a single result set.

Common SQL set operators:

UNION: Combines results and removes duplicates.

UNION ALL: Combine results and keep duplicates.

INTERSECT: Return only common value from both queries.

MINUS: Returns record in first query but not in second.

What is the difference between UNION and UNION ALL?

UNION: Removes duplicate rows from the result set ensuring unique rows are returned.

UNION ALL: Includes all rows from each query including duplicates.

Performance-wise UNION ALL is faster because it doesn't require an additional step to remove duplicates.