Mysql Roadmap

Create Database in SQL

The first step to storing the information electronically using SQL includes creating database. And in this section we will learn how to Create, Select, Drop, and Rename databases with examples.

- SQL CREATE Database
- SQL DROP Database
- SQL RENAME Database
- SQL SELECT Database

Tables in SQL

The cornerstone of any SQL database is the table. Basically, these structure functions is very similar to spreadsheets, which store data in very organized grid format. In this section, you will learn how to Create, Drop, Delete, and more related to Table.

- SQL CREATE TABLE
- SQL DROP TABLE
- SQL DELETE TABLE
- SQL RENAME TABLE
- SQL TRUNCATE TABLE
- SQL COPY TABLE
- SQL TEMP TABLE
- SQL ALTER TABLE

SQL Queries

In this section, you will learn about the SQL Queries like SELECT statement, SELECT LAST, and more. Explore this section and learn how to use these queries.

- SQL SELECT Statement
- SQL SELECT TOP
- SQL SELECT FIRST
- SQL SELECT LAST
- SQL SELECT RANDOM
- SQL SELECT IN
- SQL SELECT Multiple
- SQL SELECT DATE
- SQL INSERT Multiple Rows
- SQL INSERT INTO
- SQL UPDATE Statement
- SQL DELETE Statement
- SQL DELETE Duplicate Rows

SQL Clauses

Unlock the power of SQL Clauses with this SQL tutorial. Here in this section, you will learn how to use SELECT, WHERE, JOIN, GROUP BY, and more to query databases effectively.

- SQL WHERE Clause
- SQL WITH Clause
- SQL HAVING Clause
- SQL ORDER By Clause
- SQL Group By Clause
- SQL LIMIT Clause

SQL Operators

SQL Operators" refers to the fundamental symbols and keywords within the SQL that enable users to perform various operations and SQL AND, OR, LIKE, NOT, and more operators on databases. Here, we have discussed all the SQL operators in a detailed manner with examples.

- SQL AND Operator
- SQL OR Operator
- SQL LIKE Operator
- SQL IN Operator
- SQL NOT Operator
- SQL NOT EQUAL Operator
- SQL IS NULL Operator
- SQL UNION Operator
- SQL UNION ALL Operator
- SQL EXCEPT Operator
- SQL BETWEEN Operator
- SQL ALL Operator
- SQL ANY Operator
- SQL INTERSECT Operator
- SQL EXISTS Operator
- SQL CASE Operator

SQL Aggregate Functions

Whether you are calculating the total sales revenue for a particular product, finding the average age of customers, or determining the highest value in a dataset, SQL Aggregate Functions make these tasks straightforward and manageable.

- SQL Aggregate Function
- SQL Count() Function
- SQL SUM() Function
- SQL MIN() Function

- SQL MAX() Function
- SQL AVG() Function

SQL Data Constraints

Constraints act as rules or conditions imposed on the data, dictating what values are permissible and what actions can be taken. They play a crucial role in maintaining the quality and coherence of the database by preventing errors. So, explore this section to get a hand on SQL Data Constraints.

- SQL NOT NULL Constraints
- SQL UNIQUE Constraints
- SQL Primary Key Constraints
- SQL Foreign Key Constraints
- SQL Composite Key
- SQL Unique Constraints
- SQL Alternate Key
- SQL CHECK Constraints
- SQL DEFAULT Constraints

SQL Joining Data

SQL joins serve as the weaver’s tool, allowing you to seamlessly merge data from multiple tables based on common threads. So explore this section to learn how to use JOIN command.

- SQL JOIN
- SQL Outer Join
- SQL Left Join
- SQL Right Join
- SQL Full Join
- SQL Cross Join
- SQL Self Join
- SQL UPDATE with JOIN
- SQL DELETE JOIN
- SQL Recursive Join

SQL Functions

SQL functions offer an efficient and versatile approach to data analysis. By leveraging these functions within your queries, you can enhance the depth and accuracy of your insights, transforming raw data into actionable knowledge.

- Date Functions in SQL
- String Functions in SQL
- Numeric Functions in SQL
- Statistical Functions in SQL

- JSON Functions in SQL
- Conversion Functions in SQL
- Datatype Functions in SQL
- LTRIM Function in SQL
- UPPER Function in SQL
- RTRIM Function in SQL

SQL Views

Views makes easier for anyone to access the information they need, without getting bogged down in complicated queries. Views also act like a helpful security guard, keeping the most sensitive information in the back room, while still allowing access to what's needed.

- SQL CREATE VIEW
- SQL DROP VIEW
- SQL UPDATE VIEW
- SQL RENAME VIEW
- SQL DELETE VIEW

SQL Indexes

Indexes work by organizing specific columns in a particular order, allowing the database to quickly pinpoint the information you need. And in this section, we have listed all the points that one has to learn while learning SQL.

- SQL Indexes
- SQL Create Index
- SQL Drop Index
- SQL Show Indexes
- SQL Unique Index
- SQL Clustered Index vs Non-Clustered Index

SQL Miscellaneous Topics

In this miscellaneous section, you will encounter concepts like stored procedures for automating repetitive tasks, triggers for automated actions based on data changes, and window functions for complex calculations within a single query.

- SQL Wildcards Operators
- SQL Comments
- SQL Pivot and Unpivot
- SQL Injection
- SQL Hosting
- SQL Performance Tuning
- SQL Stored Procedures

- SQL Transactions
- SQL Sub Queries
- SQL Using Sequences
- SQL Auto Increment
- SQL Window functions
- SQL Date & Time
- SQL Cursors
- SQL Common Table Expressions
- SQL Database Tuning
- SQL Dynamic SQL