



PRESENTATION ON SQL Commands

Presentation Prepared By

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Q: What are the types of commands available in SQL?

Ans: SQL have five types of commands

- 1. DDL (Data Definition Language) Commands**
- 2. DML (Data Manipulation Language) Commands**
- 3. TCL (Transaction Control Language) Commands**
- 4. Session Control Commands**
- 5. System Control Commands**

Q: What is the purpose of DDL Commands in SQL?

Ans: DDL Commands are used for

1. Creating a database,
2. Creating tables in a database,
3. Creating Views based on Tables
4. Modifying structure of a table
5. Deleting table / View / Database

Q: Write name of some DDL commands available given in your textbook.

Ans: Following DDL commands are available in SQL and in given in our textbook:

- 1. CREATE DATABASE**
- 2. CREATE TABLE**
- 3. CREATE VIEW**
- 4. ALTER TABLE**
- 5. DROP TABLE**

Q: How we can create a database in SQL? Write command syntax for creating a database with the name **School**.

Ans: The SQL CREATE DATABASE command / statement is used to create a new database.

Syntax: The basic syntax of this CREATE DATABASE statement is as follows

```
CREATE DATABASE DatabaseName;
```

Always the database name should be unique within the RDBMS (Relational Data Base Management System).

Example:

```
mysql> CREATE DATABASE School;
```

Q: How we can see that the School database has been created in SQL?

Ans: The SQL SHOW DATABASES command / statement is used to view the list of databases exists in SQL.

Example:

```
mysql> SHOW DATABASES;
```

```
+-----+
| Database |
+-----+
| information_schema |
| AMROOD |
| TUTORIALSPOINT |
| mysql |
| orig |
| test |
| School |
+-----+
```

List of database containing School

```
7 rows in set (0.00 sec)
```

Q: How we can select a database for operations from the list of existing database in SQL?

- Ans: When you have multiple databases in your SQL Schema, then before starting your operation, you would need to select a database where all the operations would be performed.

The SQL **USE** statement is used to select any existing database in the SQL.

Syntax

The basic syntax of the USE statement is as shown below –

USE DatabaseName;

Always the database name should be unique within the RDBMS.

Example

```
mysql> USE School;
```

Database changed is displayed as a result of this command.

Q: How we can create a Table in current database in use?

◦ Ans: The SQL **CREATE TABLE** statement is used to create a new table in the current database.

Creating a basic table involves naming the table and defining its columns and each column's data type. The name must be unique.

The basic syntax of the CREATE TABLE statement is as follows –

```
CREATE TABLE TableName
```

```
( column1 datatype [<(size)> <filed constraint>],  
  column2 datatype [<(size)> <filed constraint>],  
  column3datatype, [<(size)> <filed constraint>]
```

```
.....
```

```
columnN datatype [<(size)> <filed constraint>],  
<Table Constraint>
```

```
);
```


Q: Explain the use of CREATE TABLE command with a suitable example.

◦ Ans:

We will try to create a table employee with the following details in School.

```
mysql> CREATE TABLE EMPLOYEE
```

```
(
```

EMPID	INT	PRIMARY KEY,
NAME	VARCHAR (20)	NOT NULL,
DEPT	VARCHAR (20)	NOT NULL,
DESIG	VARCHAR (20)	NOT NULL,
BASIC	DECIMAL (8, 2),	

```
);
```

Q: How we can come to know that that a table with the name EMPLOYEE has been created or not.?

Ans:

SHOW TABLES statement is used to list the tables present in selected database or current database.

```
mysql> SHOW TABLES;
```

```
+-----+-----+
| Tables in School |
+-----+-----+
| Employee        |
+-----+-----+
1 row in set <0.0 sec>
```

Q: How we can see the structure of a table created by CREATE TABLE Command?

Ans:

DESCRIBE TABLENAME or **DESC TABLENAME** statement is used to show the structure of the TableName used with the DESCRIBE command.

```
mysql> DESC EMPLOYEE;
```

Field	Type	Null	Key	Default	Extra
EMPID	int(11)	NO	PRI		
NAME	varchar(20)	NO			
DEPT	varchar(20)	NO			
DESIG	varchar(20)	NO			
BASIC	decimal(8,2)	YES		NULL	

```
5 row in set <0.0 sec>
```

Q: How you can add a new field in the table employee at the end of the table structure.

Ans:

ALTER TABLE command /statement is used to add a new field to the table that already exists.

Syntax

```
ALTER TABLE <TABLENAME>  
    ADD column [<(size)>, [constraints>];
```

```
mysql> ALTER TABLE EMPLOYEE  
    ADD DA Decimal(5,2);
```

This command will add column DA at the end of the table structure. see the structure

```
mysql> DESC EMPLOYEE;
```

Q: How we can add a column at the top of the table structure?

Ans: **FIRST** Clause is used with ALTER TABLE command / statement to add a new field to the top of the table structure.

Syntax

```
ALTER TABLE <TABLENAME>  
    ADD column [<(size)>, [constraints>]  
    FIRST;
```

```
mysql> ALTER TABLE EMPLOYEE  
    ADD ROLL TINYINT NOT NULL FIRST;
```

```
mysql> DESC EMPLOYEE;
```

Q: How we can add a column before an existing column of the table structure?

Ans: **BEFORE** filename Clause is used with ALTER TABLE command / statement to add a new filed to the top of the table structure.

Syntax

```
ALTER TABLE <TABLENAME>  
    ADD column [<(size)>, [constraints>]  
    BEFORE Filename;
```

```
mysql> ALTER TABLE EMPLOYEE  
    ADD SEX CHAR(1) NOT NULL  
    BEFORE DESIG;
```

```
mysql> DESC EMPLOYEE;
```

Q: How we can change name / rename an existing filed?

Ans: **CHANGE** Clause is used with ALTER TABLE command / statement to rename a new filed to the top of the table structure.

Syntax

ALTER TABLE <TABLENAME>

CHANGE OldColName NewColName
[<(size)>, [constraints>];

```
mysql> ALTER TABLE EMPLOYEE  
CHANGE SEX GENDER CHAR(12) NOT NULL;
```

```
mysql> DESC EMPLOYEE;
```