

DDL (Data Definition Language) commands

1. CREATE

The CREATE statement is used to create new database objects like databases, tables, views, indexes, etc.

Example: Creating a new table

```
CREATE TABLE customers (  
    customer_id INT PRIMARY KEY AUTO_INCREMENT,  
    first_name VARCHAR(50) NOT NULL,  
    last_name VARCHAR(50) NOT NULL,  
    email VARCHAR(100) UNIQUE,  
    phone VARCHAR(20)  
);
```

2. ALTER

The ALTER statement is used to modify the structure of an existing database object.

Example: Adding a new column to an existing table

```
ALTER TABLE customers ADD city VARCHAR(50);
```

2.1. Adding a new column to a table

```
ALTER TABLE customers ADD phone_number VARCHAR(20);
```

2.2. Modifying a column's data type

```
ALTER TABLE orders MODIFY order_date DATE;
```

2.3. Renaming a column

```
ALTER TABLE products RENAME COLUMN prod_name TO product_name;
```

2.4. Adding a constraint to a column

```
ALTER TABLE employees ADD CONSTRAINT unique_email UNIQUE (email);
```

2.5. Dropping a column

```
ALTER TABLE orders DROP COLUMN shipping_address;
```

3. RENAME

The RENAME statement is used to rename an existing database object.

Example: Renaming a table

```
RENAME TABLE customers TO clients;
```

4. TRUNCATE

The TRUNCATE statement is used to remove all rows from a table while keeping the table structure intact.

Example: Truncating a table

```
TRUNCATE TABLE clients;
```

5. DROP

The DROP statement is used to remove an existing database object entirely.

Example: Dropping a table

```
DROP TABLE clients;
```

Example: Dropping a database

```
DROP DATABASE customer_database;
```

Here are some additional examples of using DDL statements:

Creating a new database

```
CREATE DATABASE customer_database;
```

6. VIEWS

Creating a new view

```
CREATE VIEW active_customers AS  
SELECT customer_id, first_name, last_name, email  
FROM customers  
WHERE status = 'active';
```