

Managing Database

- show databases;
- create database <database-name>;
- drop database <database-name>;
- create database if not exists <database-name>;
- drop database if exists <database-name>;
- use <database-name>;
- select database();

SQL (Structure Query Language)

- SQL is a standard language used for interacting with relational databases.
- Different Sub Languages of SQL:
 - DDL (Data Definition Language)
 - DML (Data Manipulation Language)
 - SQL (Data Query Language)
 - TCL (Transaction Control Language)
 - DCL (Data Control Language)

DDL

- These commands are given to work with database objects such as tables, views etc.
- Example:
 - CREATE
 - ALTER
 - DROP
 - TRUNCATE

DML

- These commands are given to store/ update/ delete data.
- Example:
 - INSERT
 - UPDATE

- DELETE

DQL

- These commands are given to fetch/read data.
- Example:
 - SELECT

TCL

- These commands are given to control transaction.
- Example:
 - COMMIT
 - ROLLBACK
 - SAVEPOINT

DCL

- These commands are given to manage permission.
- Example:
 - GRANT
 - REVOKE

Creating Table

```
CREATE TABLE table_name (  
    column1 datatype,  
    column2 datatype,  
    ...  
);
```

```
CREATE TABLE employee(  
    employeeid int,
```

```
    firstname varchar(30),  
    lastname varchar(30)  
);
```

```
desc table_name;
```

```
show tables;
```

Modifying Table

```
ALTER TABLE employee ADD address varchar(100);
```

```
ALTER TABLE employee MODIFY address varchar(10);
```

```
ALTER TABLE employee MODIFY address int;
```

```
ALTER TABLE employee CHANGE address age int;
```

```
ALTER TABLE employee DROP COLUMN age;
```

Rename Table

```
RENAME TABLE old_table_name TO new_table_name;
```

Delete Table

```
DROP TABLE table_name;
```

Deleting All Rows from Table

```
TRUNCATE table_name;
```