

## SQL Commands

### Data Definition Language (DDL) Commands

#### CREATE

Creates a new database, table, index, or view.

- Create a database:

```
```sql
CREATE DATABASE database_name;
```
```

- Create a table:

```
```sql
CREATE TABLE table_name (
    column1 datatype,
    column2 datatype,
    column3 datatype,
    ...
);
```
```

#### ALTER

Modifies an existing database object, such as a table.

- Add a column to a table:

```
```sql
ALTER TABLE table_name
ADD column_name datatype;
```
```

- Modify a column:

```
```sql
ALTER TABLE table_name
ALTER COLUMN column_name datatype;
```
```

- Drop a column:

```
```sql
ALTER TABLE table_name
DROP COLUMN column_name;
```
```

#### DROP

Deletes an existing database, table, index, or view.

- Drop a database:

```
```sql
DROP DATABASE database_name;
```
```

- Drop a table:

```
```sql
DROP TABLE table_name;
```
```

### TRUNCATE

Removes all records from a table, including all spaces allocated for the records are removed.

- Truncate a table:

```
```sql
TRUNCATE TABLE table_name;
```
```

## Data Manipulation Language (DML) Commands

### SELECT

Retrieves records from one or more tables.

- Select all columns from a table:

```
```sql
SELECT * FROM table_name;
```
```

- Select specific columns:

```
```sql
SELECT column1, column2 FROM table_name;
```
```

### INSERT

Adds new records into a table.

- Insert a single record:

```
```sql
INSERT INTO table_name (column1, column2, column3, ...)
VALUES (value1, value2, value3, ...);
```
```

- Insert multiple records:

```
```sql
INSERT INTO table_name (column1, column2, column3, ...)
VALUES
(value1, value2, value3, ...),
(value1, value2, value3, ...),

```

...  
...  
...

### UPDATE

Modifies existing records in a table.

- Update specific records:

```
```sql
UPDATE table_name
SET column1 = value1, column2 = value2
WHERE condition;
```
```

### DELETE

Deletes existing records from a table.

- Delete specific records:

```
```sql
DELETE FROM table_name
WHERE condition;
```
```

## Data Control Language (DCL) Commands

### GRANT

Gives a user permission to perform specific tasks.

- Grant permission:

```
```sql
GRANT SELECT, INSERT, UPDATE ON table_name TO user_name;
```
```

### REVOKE

Removes a user's permission to perform specific tasks.

- Revoke permission:

```
```sql
REVOKE SELECT, INSERT, UPDATE ON table_name FROM user_name;
```
```

## Transaction Control Language (TCL) Commands

### COMMIT

Saves all transactions to the database.

- Commit a transaction:

```
```sql
```

```
COMMIT;  
'''
```

## ROLLBACK

Undoes transactions that have not yet been saved to the database.

- Rollback a transaction:

```
```sql  
ROLLBACK;  
'''
```

## SAVEPOINT

Sets a point within a transaction to which you can later roll back.

- Create a savepoint:

```
```sql  
SAVEPOINT savepoint_name;  
'''
```

- Rollback to a savepoint:

```
```sql  
ROLLBACK TO SAVEPOINT savepoint_name;  
'''
```