

## DDL

**Data Definition Language (DDL)** statements are used to define the database structure or schema. Some examples:

- CREATE - to create objects in the database
- ALTER - alters the structure of the database
- DROP - delete objects from the database
- TRUNCATE - remove all records from a table, including all spaces allocated for the records are removed
- COMMENT - add comments to the data dictionary
- RENAME - rename an object

## DML

**Data Manipulation Language (DML)** statements are used for managing data within schema objects. Some examples:

- SELECT - retrieve data from the a database
- INSERT - insert data into a table
- UPDATE - updates existing data within a table
- DELETE - deletes all records from a table, the space for the records remain
- MERGE - UPSERT operation (insert or update)
- CALL - call a PL/SQL or Java subprogram
- EXPLAIN PLAN - explain access path to data
- LOCK TABLE - control concurrency

## DCL

**Data Control Language (DCL)** statements. Some examples:

- GRANT - gives user's access privileges to database
- REVOKE - withdraw access privileges given with the GRANT command

## TCL

**Transaction Control (TCL)** statements are used to manage the changes made by DML statements. It allows statements to be grouped together into logical transactions.

- COMMIT - save work done
- SAVEPOINT - identify a point in a transaction to which you can later roll back
- ROLLBACK - restore database to original since the last COMMIT

- SET TRANSACTION - Change transaction options like isolation level and what rollback segment to use

## **Syntax:**

### **Create Table Syntax:**

Create table table\_name (col1 datatype1, col2 datatype2 ...coln datatype n)

### **Insert Syntax:**

Case 1: insert into table\_name values (value1, value2, value3 .... Value n)

Case 2: insert into table\_name(col1, col2, col3 ... Coln) values (value1, value2, value3.. Value n)

### **Select Syntax:**

Select \* from table\_name -- here \* indicates all columns

or

Select col1, col2, ... coln from table\_name

### **Update Syntax:**

Update table\_name set col1 = value1, col2 = value2 where condition

### **Delete Syntax:**

Delete from table\_name where condition

### **Truncate Syntax:**

truncate table table\_name

### **Drop Syntax:**

Drop table table\_name

### **Rename Syntax:**

rename old\_table\_name to new\_table\_name