

DDL-Data Definition Language

DDL is used to construct an object in the database and deals with the Structure of the Object

DDL commands are auto committed.

1. CREATE:

" IT IS USED TO BUILD / CONSTRUCT AN OBJECT ".

How to Create a Table:

- Name of the table. (Tables cannot have same names)
- Number of Columns.
- Names of the columns.
- Assign datatypes for the Columns.
- Assign Constraints [NOT MANDATORY]

Syntax to create a table:

```
CREATE TABLE Table_Name(  
    Column_Name1 datatype constraint_type,  
    Column_Name2 datatype constraint_type,  
    Column_Name3 datatype constraint_type,  
    Column_NameN datatype constraint_type ...  
);
```

```
CREATE TABLE Table_Name(  
    Column_Name1 datatype constraint_type ,  
    Column_Name2 datatype constraint_type ,  
    ..  
    Column_NameN datatype,  
    Constraint constraint_name Foreign key references  
    Parent_Table_Name(Column_Name)  
);
```

Example:

```
Create table Customer(  
Cid int primary key,  
Cname varchar(10),  
contact int not null,  
Address varchar(15) default 'Pune'  
);
```

```
Create table Product (  
pid int primary key,  
pname varchar(20),  
price decimal(7,3) check(price>0),  
cid int,  
Constraint cid_fk Foreign key(cid) references Customer(cid)  
);
```

```
CREATE TABLE DEPARTMENTS (  
DEPARTMENT_ID DECIMAL PRIMARY KEY,  
DEPARTMENT_NAME VARCHAR(30) NOT NULL,  
LOCATION_ID VARCHAR(20),  
FOREIGN KEY (LOCATION_ID) REFERENCES LOCATIONS(LOCATION_ID )  
);
```

NOTE:

To Describe the table:

Syntax: **DESC Table_Name;**

2. Rename:

“IT IS USED TO CHANGE EXISTING NAME OF AN OBJECT.”

Syntax to rename a table:

RENAME TABLE TABLE_NAME **TO** NEW_NAME;

Example:

RENAME TABLE Customer TO cust;

3. Alter:

“IT IS USED TO MODIFY THE STRUCTURE OF THE TABLE.”

1. *Syntax to add a column:*

ALTER TABLE Table_Name **ADD** Column_Name Datatype Constraint_type;

EXAMPLE:

ALTER TABLE customer ADD email varchar(20) not null;

2. *Syntax to Remove a column:*

ALTER TABLE Table_Name **DROP COLUMN** Column_Name;

Example:

ALTER TABLE customer DROP COLUMN email;

3. *Syntax to Rename a column:*

ALTER TABLE Table_name **RENAME COLUMN** Column_Name **TO** New_name

Example:

ALTER TABLE customer RENAME COLUMN location TO address;

4. *Syntax to modify datatype*

ALTER TABLE Table_name **MODIFY** Column_name new_datatype;

Example:

ALTER TABLE customer MODIFY mail varchar(20);

4. Drop:

" IT IS USED TO REMOVE THE TABLE FROM THE DATABASE "

Syntax To Drop a Table:

DROP TABLE Table_name;

EXAMPLE:

DROP TABLE Customer;

5. Truncate:

" IT IS USED TO REMOVE ALL THE RECORDS FROM THE TABLE PERMANENTLY "

Syntax To Truncate a Table:

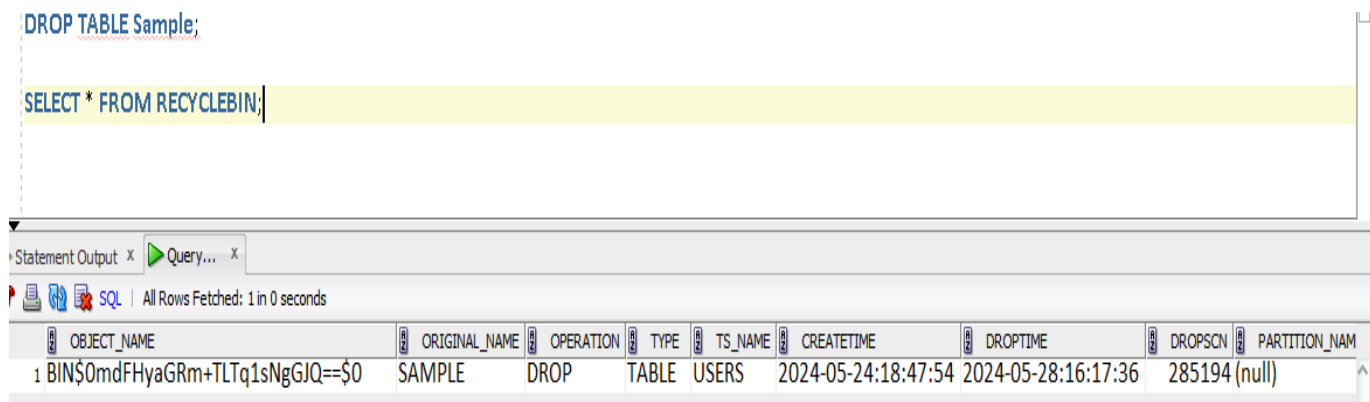
TRUNCATE TABLE TABLE_NAME;

Example:

TRUNCATE TABLE Customer;

NOTE:

In Oracle Database drop objects are get stored in recyclebin;



The screenshot shows a SQL Developer interface. The top pane contains two SQL statements: `DROP TABLE Sample;` and `SELECT * FROM RECYCLEBIN;`. The bottom pane, titled 'Statement Output', shows the result of the second query. It displays a table with columns: OBJECT_NAME, ORIGINAL_NAME, OPERATION, TYPE, TS_NAME, CREATETIME, DROPTIME, DROPSCN, and PARTITION_NAME. The first row of data shows that the 'SAMPLE' table has been moved to the recyclebin with a drop SCN of 285194.

OBJECT_NAME	ORIGINAL_NAME	OPERATION	TYPE	TS_NAME	CREATETIME	DROPTIME	DROPSCN	PARTITION_NAME
1 BIN\$0mdFHyaGRm+TLTq1sNgGJQ==\$0	SAMPLE	DROP	TABLE	USERS	2024-05-24:18:47:54	2024-05-28:16:17:36	285194	(null)

To **Restore** table **Flashback** Command is there

Example: FLASHBACK TABLE Sample to before drop;

To Drop table permanently use '**PURGE**'

Example: DROP TABLE SAMPLE PURGE;