

```
### " DDL : Data Definition Language " ====>
=====
```

\* Data Definition Language or DDL commands are used for changing the structure of a table.  
\* In other words, DDL commands are capable of creating, deleting, and modifying the structural information about the table.

```
## CREATE TABLE ==>
=====
```

\* Used for creating a new table in the database.

Syntax:- Create Table (table\_name) ( <col\_name> <data type>(size),. . . . . );

Example:- SQL> create table Students( Roll\_No number(3), S\_Name varchar2(20),  
DOB date);

\* We Can also create table in Multiple lines : -

```
SQL> create table Products
2  (Product_Id number(2),
3  Product_Name varchar2(20),
4  Product_Price number(4),
5  Product_Qty number(2)
6  );
```

```
# Viewing The Structure Of The Table (DESCRIBE Command) ==>
=====
```

Example:- Describe Products;

```
SQL> describe Products
```

Name	Null?	Type
PRODUCT_ID		NUMBER(2)
PRODUCT_NAME		VARCHAR2(20)
PRODUCT_PRICE		NUMBER(4)
PRODUCT_QTY		NUMBER(2)

```
## ALTER TABLE ==>
=====
```

The ALTER TABLE command is used to make structural changes to the TABLE. The term structural changes means :

- Adding new columns
- Modifying existing columns
- Removing columns
- Renaming columns
- Renaming table

```
# Adding New Column ==>
```

- To add a new column to the table we use the add clause with the ALTER TABLE command.

Syntax: Alter table <table\_name> add(<col\_name> <data type>(size),. . .);

Example: Alter table Students add(per number(5,3));

SQL> describe Students

Name	Null?	Type
ROLL_NO		NUMBER(3)
S_NAME		VARCHAR2(20)
DOB		DATE
PER		NUMBER(5,3)

# Modifying A Column ==>

- To modify a column in the table we use the modify clause with the ALTER TABLE command,.

Syntax:- Alter table <table\_name> modify <col\_details>;

Example:- Alter table Students modify S\_NAME varchar2(25);

# Modifying Multiple Columns ==>

Syntax: Alter table <table\_name> modify (<col1\_details>,<col2\_details>,...);

Example: Alter table Students modify (roll\_no number(4), per number(6,2));

SQL> desc students

Name	Null?	Type
ROLL_NO		NUMBER(4)
S_NAME		VARCHAR2(30)
DOB		DATE
PER		NUMBER(6,2)
MOBILE_NO		NUMBER(10)

# Removing A Column ==>

\* Removing or dropping a column is a feature made available from Oracle 9i onwards and there are 2 types of column removals.

- Physical Delete
- Logical Delete

# Physical Delete :-

- For physically deleting a column Oracle provides a clause called DROP which can be used with ALTER TABLE command.
- When this is done Oracle totally removes the column from the table along with it's data.

\* Deleting Single Column:

Syntax : Alter table <table\_name> drop column <column\_name>;

Example : Alter table Students drop column per;

\* Deleting Multiple Column:

Syntax : Alter table <table\_name> drop (<column\_name1>,<column\_name2>..);

Example : Alter table Students drop (s\_name, dob);

# Logical Delete :-

- If due to heavy network traffic , the speed of processing data becomes slow then rather than deleting the columns physically Oracle recommends us to delete them logically.
- To do this we use a clause called SET UNUSED along with ALTER TABLE command.

\* Deleting Single Column:

Syntax : Alter table <table\_name> set unused column <column\_name>;

Example : Alter table Students set unused column per;

\* Deleting Multiple Column:

Syntax : Alter table <table\_name> set unused

(<column\_name1>,<column\_name2>..);

Example : Alter table Students set unused (s\_name, dob);

SQL> desc students

Name	Null?	Type
ROLL_NO		NUMBER(3)
S_NAME		VARCHAR2(30)

# Renaming A Column ====>

\* For this we can use the RENAME COLUMN clause of the ALTER TABLE statement to rename a column.

Syntax: Alter table <table\_name> rename column <old\_name> to <new\_name>;

Example: Alter table Students rename column roll\_no to std\_id;

SQL> desc students

Name	Null?	Type
STD_ID		NUMBER(3)
S_NAME		VARCHAR2(30)

# Renaming A Table ====>

\* Oracle provides us 2 ways to rename a table:

- Using the RENAME clause with ALTER TABLE command
- Using the RENAME TABLE command

Example : Alter Table Students Rename To Scholars;

Rename Table Students To Scholars;

## TRUNCATE TABLE ====>

=====

\* The TRUNCATE TABLE command is used to remove all the data from the table .

\* The structure of the table remains but the data is lost.

Syntax: Truncate table <table\_name> ;

Example: Truncate table Students;

## DROP TABLE ====>  
=====

\* The DROP TABLE command is used to remove the table structure along with its data .

Syntax: Drop table <table\_name> ;

Example: Drop table Students;