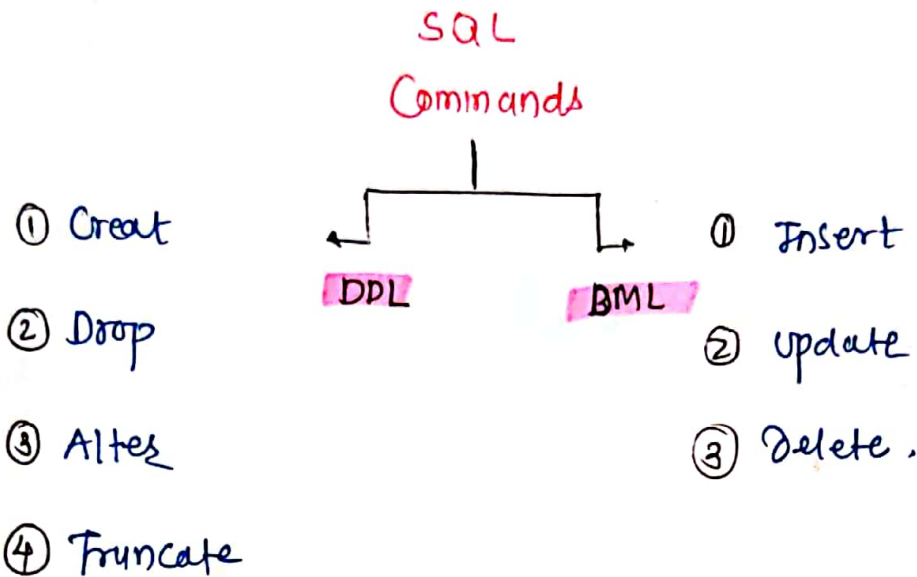


Sal

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## SQL Commands

- used to Control database (Communication)
- also used to perform specific Tasks, Functions, Queries.



Create :- used to Create a new table in database.

Syntax :- `Create Table Table-name (Column name  
datatype, size);`

Drop :- Drop Table. (Whole Table will ~~delete~~ 'Erase permanently')

Syntax - `DROP TABLE Customers;`

Alter :- It is used to modify and add data in columns

Syntax - `Alter Table Customers  
Add (Column name Data Type (size))`

Same syntax for modify.

Truncate :- It is used to delete all the row at one time from table. ②

Syntax - `Truncate Table Customers;`

## ML Commands

Insert - It is used to entering the values to the corresponding column.

Syntax - `insert into Customers (ID, Name, LastName, salary)  
values (01, Rahul, Thakre, 70,000)`

OR

Syntax - `insert into Customers  
values (02, Anush, Ramteke, 50,000)`

Update - This command used update or modify the value of a column.

syntax - `update Customers` ← Table Name  
~~set column name =~~  
`set first name = 'Rahul'`  
`where student ID = '02'`

Delete - It is used to delete one or more row from table

Syntax - `Delete from Customers  
where Age > 18`

truncate :- It is used to delete all the row at one time from table. ②

Syntax - `Truncate Table Customers;`

MC Commands

Insert - It is used to entering the values to the corresponding column.

Syntax - `insert into Customers (ID, Name, LastName, salary)  
values (01, Rahul, Thakre, 70,000)`

OR

Syntax - `insert into Customers  
values (02, Anush, Ramteke, 50,000)`

Update - This Command used update or modify the value of a column.

syntax - `update Customers` *← Table Name*  
~~set column name =~~  
`set first name = 'Rahul'`  
`where student ID = '02'`

Delete - It is used to delete one or more row from table

Syntax - `Delete from Customers  
where Age > 18`



# SQL Commands

DCL

Data Control lang)

- ① Grant
- ② Revoke

TCL

(Transaction Control lang)

- ① Commit
- ② rollback
- ③ savepoint

Grant - It is used to give access to the particular user in the database / Table.

Syntax - Grant  
select,  
Update ON Customers TO user 1, user 2.

• Revoke - used to take back permissions given to user

Syntax - Revoke select,  
Update on Customers from user 1, user 2.

④

**Commit** - used to save all the transaction To database  
Changes.

Syntax - **Delete from Customers**  
**where Age = 25 ;**  
**Commit ;**

**Rollback** - used to undo the changes done on database  
before Commit.

Syntax - **Delete from Customers**  
**where age = 25 ;**  
**Rollback ;**

**Savepoint** - use to Rollback to the specific point,  
Not a whole transaction.

syntax - **Save.point Arush - Row 5.**

**Commit** - used to save all the transaction To database  
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Syntax - **Delete from Customers**  
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Syntax - **Delete from Customers**  
**Where age = 25 ;**  
**Rollback ;**

**Savepoint** - use to Rollback to the specific point,  
 Not a whole transaction.

syntax - **Save point Anush - Row 5.**

## SQL Clouser

1. Where - (1) Where Clause is used to specify Conditions  
(2) to Filter records and fetching only necessary records from Table.

(Where is only used with)



<pre>select ID, Name from Customers Where ID = 2;</pre>	<pre>• update Customers •   Set Address = 'pune' Where ID = 6;</pre>	<pre>delete from Customers Where ID = 6;</pre>
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2. Distinct - (1) is used in conjunction with select Query  
(2) To eliminate all Duplicate records and fetching only unique records.

<p>Syntax -</p> <pre>select distinct Salary from Customers OR select distinct city from Vote-Table.</pre>	<pre>select distinct Salary from Customers order by salary where limit 3;</pre>
---	---



3. Order By - To sort the data / records  
in ascending or descending order.

Syntax - select \* from Customers  
order By Name (Alphabetically)

OR

select \* from Customers  
order By name desc; (for descending)

(This clause only used with Select Query.)

4. Group by :- (1) Group By is used with Collaboration with  
Select Query  
(2) It is used to fetch the records from  
the Table which is from same group.  
eg. department, City, Country etc.

Syntax - select \* from Customers / Employee collage  
Group By Department = 'Mech';

OR,

select \* from employee  
Group By Dept = 'Comp'  
Where name = 'Ashish' And name  
limit

Having :- (1) used mostly with Group By  
and conjunction with aggregation functions.  
(only with Count).

"having" clause was added to SQL bcoz "where"  
keyword cannot be used with aggregate func<sup>n</sup>.

## Logical Operator

1. AND → (1) To add multiple condition in select query  
(2) AND used with where clause.

Syntax — Select \* from Customers  
Where name = 'Ajay' And salary > 15,000  
And age < 25  
Limit 3 ;

2. OR → (1) Combine multiple conditions  
(2) used with where clause

Syntax — Select \* from Customers  
Where name = 'shant' or Age < 19  
Limit 10 Order By ;

## Primary key

Primary key	Foreign key
Primary key uniquely identify a record in the table.	Foreign key is a Field in the table that is primary in the another table.
Primary key Cant accept Null Value	foreign Can accept multiple Null values.
we can have only one primary key in table	we can have more than one foreign key in a table.
primary key of a perticular table is a attribute which uniquely identify every record, dose not Contains any . Null Value.	Foreign key of a perticular table is simply a primary key of some other table which is used as a refrence key in 2nd table.



★ What is the difference between Delete and

	Delete	Truncate	Drop
Command type	DML	PDL	PDL
Rollback Transaction	Can be Roll-back ✓	No	No
Permanent delete	Does not Remove record permanently	Remove the Record permanently	Remove all Record, Structure which we select. (permanently)
Performance	Slower than Truncate	Faster than Delete	Quickly but Some Complications
Where clause <u>(use)</u>	Yes	No	No.
Syntax	① Delete from table-name; ② Delete from table-name Where Condition;	① Truncate Table table-name;	① Drop table, table-name;



① Git → Git is a free & open source distributed code management and version control system.

② Github → Git is a cloud based hosting service that let manage - Git repositories.

Steps →

Git → ① It is a software installed in our local system

② It is a Command line tool

Github → ① It is a service hosted on web i.e. It is a server we can say.

② It is a space where we store and manage our source code with the help Git repositories.