→ faster operation.

29/05/25

SELECT QUERY: SELECT Column1, Column2 FROM table_name;

Syntax.

Query: SELECT Customer Name, CustID
FROM Customer;

① SELECT All columns:

Query: SELECT * FROM Customer;

② SELECT STATEMENT with WHERE CLAUSE:

SELECT CUSTOMER_NAME
FROM Customer
WHERE Age = '21';

⑧ SELECT with GROUP BY CLAUSE:

Query: SELECT Customer_id, COUNT(*) AS Order_Count
FROM Orders
GROUP BY customer_id;

→ Used to organize data into groups based on shared values in one (or) more columns
→ Used to arrange identical data into groups based on specified columns.
→ if a particular column has same values in multiple rows, the GROUP BY clause will group them rows together.
→ OFTEN used with AGGREGATE FUNCTIONS LIKE SUM, COUNT, AVG, MIN and MAX.
→ Cannot use SUM(), COUNT(), etc.

Example:

Query: SELECT name, SUM(sal) FROM emp
GROUP BY name;

Output:

name	SUM(sal)
Aarav	125000.75
Adih	60000.5
Anjali	45000.25
Chetan	80000

Example 2: Group By Multiple Columns

QUERY: SELECT SUBJECT, YEAR, COUNT(*)
FROM STUDENT
GROUP BY SUBJECT, YEAR;

O/P:

Subject	year	COUNT(*)
English	2	2
AI	1	2
Science	3	2

⊛ HAVING CLAUSE:

→ While the WHERE clause is used to place conditions on the Column, the Having clause places condition on the GROUPS

Example: SELECT Name, SUM(sal) FROM Emp
GROUP BY name
HAVING SUM(sal) > 50000;

output:

Name	SUM(sal)
Aarav	125000.75
Aditi	60000.5
Chetan	80000

⊛ FROM Clause: FROM which table in the Database do we have to select data.

Query 1:
⊛ SELECTING ~~TABLE~~ Data from Single Table:

Ex: SELECT name, age FROM students;

Query 2: SELECTING DATA From Multiple Tables

Ex: SELECT students.name, courses.course_name
FROM STUDENTS
INNER JOIN enrollments ON students.student_id = enrollments.student_id;

⊛ Subqueries: A Query nested within a Query

Query: SELECT name
FROM (SELECT name, age FROM students WHERE age > 18) AS adult_students;

SQL | WHERE Clause:

① SELECT column1, column2 FROM table_name WHERE column_name operator value;

Query: SELECT ⊛ FROM Empl WHERE Age = 24;

Output:

EmpID	Name	country	Age	Mob
3	Naveen	Srilanka	24	8487

Example 2: WHERE clause with BETWEEN Operator

Syntax:

SELECT column1, column2 FROM table_name
WHERE column_name BETWEEN value 1 and value 2;

Query: SELECT * FROM Empl WHERE Age BETWEEN 22 and 24;

Example 3: WHERE clause with LIKE operator

Syntax: SELECT column1, column2 FROM table_name WHERE column_name LIKE pattern;

Query: SELECT * FROM Empl WHERE Name LIKE 'S%'

Output:

EMPID	Name	Country	Age	Mob
1	Shubham	India	23	9356878...

Query: SELECT * FROM Empl WHERE Name LIKE '%M'

Output:

EMPID	Name	Country	Age	Mob
1	Shubham	India	23	7394876...
2	Aman	Australia	21	7320426...

Example 4: WHERE CLAUSE with IN Operator

Syntax: SELECT column1, column2 FROM table_name WHERE column_name IN (value1, value2);

Query: SELECT Name FROM Empl WHERE Age IN (21, 23);

Output:

Name
Shubham
Aman
Aditya