

SESSION WILL BE DIVIDED INTO

1. Understanding Operators in SQL
2. Different Types of Operators in SQL
3. Exploring Each Type of Operator
4. Closing the Session

SECTION 1

Understanding Operators

- What are Operators?
 - Operator are special symbols or keywords used to perform operations on data values or columns in SQL statements
 - Think of operators like
 - **Perform Calculations**
 - **Compare values**
 - **Filter Data**
 - **Combine Results Sets**
 - **Evaluate Logical Conditions**
 - They are the fundamental conditions in **SELECT, WHERE, JOIN, HAVING** and other clauses.

SECTION 2

Types of Operators

- What are the different kind of Operators
 - **Arithmetic Operators**
 - **Comparison Operators**
 - **Logical Operators**
 - **Bitwise Operators**
 - **Other Special Operators**

SECTION 3

Exploring
Each
Operator in
Detail

- What are the different kind of Operators
 - **Arithmetic Operators**

Operator	Description	Example
+	Addition	SELECT 10 + 5;
-	Subtraction	SELECT 10 - 5;
*	Multiplication	SELECT 10 * 5;
/	Division	SELECT 10 / 5;
%	Modulus (Remainder)	SELECT 10 % 3;

SECTION 3

Exploring Each Operator in Detail

- What are the different kind of Operators
 - **Comparison Operator**

Operator	Description	Example
=	Equal to	WHERE salary = 5000
!= or <>	Not equal to	WHERE department_id <> 10
>	Greater than	WHERE marks > 60
<	Less than	WHERE age < 30
>=	Greater than or equal	WHERE quantity >= 5
<=	Less than or equal	WHERE discount <= 0.1

SECTION 3

Exploring Each Operator in Detail

- What are the different kind of Operators
 - **Logical Operators**

Operator	Description	Example
AND	Returns TRUE if both conditions are true	WHERE age > 25 AND city = 'Delhi'
OR	Returns TRUE if any one condition is true	WHERE city = 'Delhi' OR city = 'Mumbai'
NOT	Reverses the result	WHERE NOT (age > 30)

SECTION 3

Exploring Each Operator in Detail

- What are the different kind of Operators
 - **Bitwise Operators**

Operator	Description	Example
&	Bitwise AND	5 & 3
		Bitwise OR
^	Bitwise XOR	5 ^ 3
~	Bitwise NOT	~5

SECTION 3

Exploring
Each
Operator in
Detail

- What are the different kind of Operators
 - **Other Special Operators**

Operator	Description	Example
BETWEEN	Checks if value is within range	WHERE salary BETWEEN 30000 AND 60000
IN	Checks if value is in list	WHERE city IN ('Delhi', 'Mumbai')
LIKE	Pattern matching	WHERE name LIKE 'A%'
IS NULL	Checks for NULL values	WHERE address IS NULL
IS NOT NULL	Checks if value is not NULL	WHERE address IS NOT NULL
EXISTS	Checks if subquery returns any row	WHERE EXISTS (SELECT 1 FROM orders WHERE customer_id = c.id)