Operator

• Operators are symbols or keywords used to perform operations.

Arithmetic Operator

• It is used in number and date data type columns.

Operator	Meaning
+	Addition
-	Subtraction
*	Multiplication
/	Division

Create Table

```
CREATE TABLE employee (
employee_id INT,
name VARCHAR(50),
department VARCHAR(50),
salary DECIMAL(10, 2),
hire_date DATE
);

Insert Records

INSERT INTO employee VALUES
```

```
(1,'Raj', 'IT', 30000.00, '2023-01-15'),
(2,'Ram', 'HR', 40000.00, '2023-05-20'),
(3,'Rajesh', 'Finance', 60000.00, '2021-10-10'),
(4,'Rahul', 'IT', 45000.00, '2021-02-28'),
(5,'Deepak', 'HR', 32000.00, '2024-07-12');
```

Example#1

Write a query to display employee id, name, salary, annual salary from employee table.

SELECT employee_id AS 'Empl Id', name as 'Name', salary as 'Salary', salary*12 as 'Annual Salry' FROM employee;

Relational Operator

These operators are used to compare two values.

Operator	Meaning
<	less than
<=	less than or equal to
>	greater than
>=	greater than or equal to
=	equal to
!= or <>	not equal to

Example#2

Write a query to display employees whose salary is less than 40000.

select * from employee where salary<40000;

Example#3

Write a guery to display employees whose salary is less than or equal to 40000.

select * from employee where salary<=40000;

Example#4

Write a query to display employees whose annual salary is less than 400000.

select * from employee where salary*12<=400000;

Example#5

Write a query to display employees whose salary is greater than 40000.

select * from employee where salary>40000;

Example#6

Write a query to display employees whose salary is greater than or equal to 40000.

select * from employee where salary>=40000;

Example#7

Write a query to display employees whose salary is 40000.

select * from employee where salary=40000;

Example#8

Write a query to display employees whose salary is not 40000.

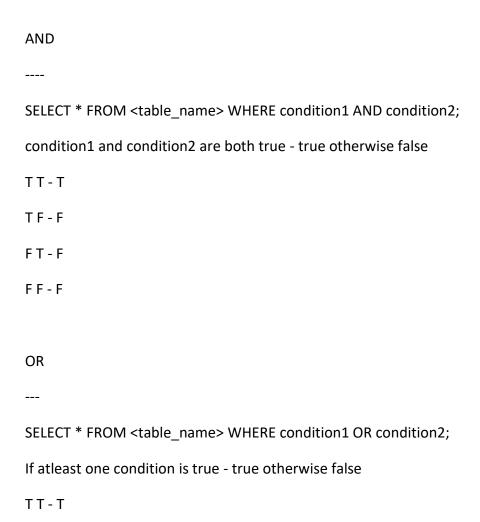
select * from employee where salary!=40000;

select * from employee where salary<>40000;

Logical Operator

- Logical operators are allowed to use in where clause only.
- If we want to specify more than one in where clause then we are going to use logical operator.
- These operators are used to compare 2 conditions.

Operator	Meaning
AND	return true when both conditios are satisfied.
OR	returns true if atleast one condition satisfied.
NOT	False when condition is satisfied. return true condition is not satisfied.



```
TF-T
FT-T
FF-F
Example#1
Display employee who belongs to IT department and Salary is more than 32000.
SELECT * FROM employee WHERE department='IT' and SALARY>32000;
SELECT * FROM employee WHERE and SALARY>32000 and department='IT';
2. Write a query to display all employee whose hiring is 2023.
SELECT * FROM employee WHERE date format(hire date, '%Y') = '2023';
3. Write a query to diplay employee details whose name is 'Raj'and belong IT.
SELECT * FROM employee WHERE name='Raj' and department='IT';
4. WAQ to display hire date where name is Rahul and department is IT.
SELECT hire date FROM employee WHERE name='Rahul' and department='IT';
5. WAQ to display employee whose salary is more than 30000 and less than 60000.
SELECT * FROM employee where salary > 30000 and salary < 60000;
6. WAQ to display employee who have completed 1 year in the organizationSELECT * FROM
employee where DATEDIFF(CURDATE(), hire_date) >= 365;
7. WAQ to display employee who joined on Jan.
SELECT * FROM employee WHERE DATE FORMAT(hire date, '%m') = '01';
```

8. WAQ to display the name, hiring date (only year) of the employee.

SELECT name, date format(hire date, '%Y') as 'Year' from employee;

Assignment#1

Write a query to display employees who either work in the IT department or have a salary greater than or equal to 40000 but are not hired in the year 2021.

SELECT * from Employee where (department='IT' OR salary >= 40000) AND (date_format(hire_date,'%Y')!=2021);