Filtering and Sorting

Question 1 : Show employees working in either the 'IT' or 'HR' departments.

->   **CREATE TABLE** Employees (
EmpID INT PRIMARY KEY,
EmpName VARCHAR(50),
Department VARCHAR(30),
City VARCHAR(30),
Salary INT,
HireDate DATE);

EmpID	EmpName	Department	City	Salary	HireDate
101	Rahul Mehta	Sales	Delhi	55000	2020-04-12
102	Priya Sharma	HR	Mumbai	62000	2019-09-25
103	Aman Singh	IT	Bengaluru	72000	2021-03-10
104	Neha Patel	Sales	Delhi	48000	2022-01-14
105	Karan Joshi	Marketing	Pune	45000	2018-07-22
106	Divya Nair	IT	Chennai	81000	2019-12-11
107	Raj Kumar	HR	Delhi	60000	2020-05-28
108	Simran Kaur	Finance	Mumbai	58000	2021-08-03
109	Arjun Reddy	IT	Hyderabad	70000	2022-02-18
110	Anjali Das	Sales	Kolkata	51000	2023-01-15

ANS-1)   SELECT *
FROM Employees
WHERE Department IN ('IT', 'HR');

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Question 2 : Retrieve employees whose department is in 'Sales', 'IT', or 'Finance'.

ANS-2)   SELECT *
FROM Employees
WHERE Department IN ('Sales', 'IT', 'Finance');

Question 3 : Display employees whose salary is between ₹50,000 and ₹70,000.

ANS-3)   SELECT *
FROM Employees
WHERE Salary BETWEEN 50000 AND 70000;

Result (from your sample data)

Employees returned will be:

- Rahul Mehta — ₹55,000
- Priya Sharma — ₹62,000
- Raj Kumar — ₹60,000
- Simran Kaur — ₹58,000
- Arjun Reddy — ₹70,000
- Anjali Das — ₹51,000

Question 4 : List employees whose names start with the letter 'A'.

ANS-4)   SELECT *
FROM Employees
WHERE EmpName LIKE 'A%';

Result (from your sample data)

This will return:

- **Aman Singh**
- **Arjun Reddy**
- **Anjali Das**

Explanation:

- `'A%'` → matches any name that **starts with A** followed by any characters.

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Question 5 : Find employees whose names contain the substring 'an'.

ANS-5)   SELECT *
FROM Employees
WHERE EmpName LIKE '%an%';

Employees matched:

- **Aman Singh**
- **Simran Kaur**
- **Anjali Das**
- **Karan Joshi**

Explanation:

- `'%an%'` matches names where **"an" appears anywhere** in the name.

Question 6 : Show employees who are from 'Delhi' or 'Mumbai' and earn more than ₹55,000.

ANS-6)   SELECT *
FROM Employees
WHERE City IN ('Delhi', 'Mumbai')
 AND Salary > 55000;

Employees returned:

- **Priya Sharma** — Mumbai, ₹62,000
- **Raj Kumar** — Delhi, ₹60,000
- **Simran Kaur** — Mumbai, ₹58,000

Explanation:

- City IN ('Delhi', 'Mumbai') filters the cities
- Salary > 55000 ensures only higher earners are selected
- AND applies both conditions together

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Question 7 : Display all employees except those from the 'HR' department.

ANS-7)   SELECT *
FROM Employees
WHERE Department <> 'HR';

Explanation

- <> or != means **"not equal to"**
- This filters out employees who belong to the **HR** department

   Result:
 All employees from **Sales, IT, Marketing, and Finance** will be shown.

Question 8 : Get all employees hired between 2019 and 2022, ordered by HireDate (oldest first).

ANS-8)   SELECT *
FROM Employees
WHERE HireDate BETWEEN '2019-01-01' AND '2022-12-31'
ORDER BY HireDate ASC;

Explanation

- BETWEEN '2019-01-01' AND '2022-12-31' filters employees hired from **2019 through 2022**
- ORDER BY HireDate ASC sorts results from **oldest to newest**

This will return employees hired in **2019, 2020, 2021, and 2022**, in chronological order.