



ASSIGNMENT TITLE

Filtering and Sorting

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Course : Data Analytics With AI – September batch Live

Institute : PW Skills

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

SQL Query:

The screenshot shows a SQL query editor interface. At the top, there are tabs for "Query" (which is selected) and "Query History". To the right of the tabs are buttons for "Scratch Pad" and a close button. Below the tabs is a code editor containing the following SQL query:

```
1  SELECT *
2  FROM Employees
3  WHERE Department IN ('IT', 'HR');
4
```

Below the code editor is a "Data Output" section which is currently empty. At the bottom of the interface is a toolbar with various icons, and below that is a table showing the structure of the "Employees" table:

	empid	empname	department	city	salary	hiredate
[PK]	integer	character varying (50)	character varying (50)	character varying (50)	integer	date

Explanation:

The `IN` operator checks whether the department is either IT or HR. It returns all employees belonging to these two departments.

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

SQL Query:

Query Query History

```
1  SELECT *
2  FROM Employees
3  WHERE Department IN ('Sales', 'IT', 'Finance');
4
```

Data Output Messages Notifications

	empid [PK] integer	empname character varying (50)	department character varying (50)	city character varying (50)	salary integer	hiredate date
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Explanation:

Multiple departments are filtered using `IN` for cleaner, readable syntax.

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

SQL Query:

Query Query History

```
1  SELECT *
2  FROM Employees
3  WHERE Salary BETWEEN 50000 AND 70000;
4
```

Data Output Messages Notifications

	empid [PK] integer	empname character varying (50)	department character varying (50)	city character varying (50)	salary integer	hiredate date
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Explanation:

The BETWEEN operator is inclusive of both boundary values.

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

SQL Query:

The screenshot shows a SQL query editor interface. At the top, there are tabs for 'Query' (which is selected) and 'Query History'. Below the tabs is a code editor containing the following SQL query:

```
1  SELECT *
2  FROM Employees
3  WHERE EmpName LIKE 'A%';
4
```

Below the code editor is a toolbar with icons for Data Output, Messages, and Notifications. The main area displays the schema of the 'Employees' table:

	empid [PK] integer	empname character varying (50)	department character varying (50)	city character varying (50)	salary integer	hiredate date
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Explanation:

A% matches names beginning with A (example: Aman, Arjun, Anjali).

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

SQL Query:

Query Query History

```
1 SELECT *
2 FROM Employees
3 WHERE EmpName LIKE '%an%';
4
```

Data Output Messages Notifications

	empid [PK] integer	empname character varying (50)	department character varying (50)	city character varying (50)	salary integer	hiredate date
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Explanation:

%an% matches any name that has "an" anywhere (Aman, Karan, Anjali).

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

SQL Query:

Query Query History

```
1 SELECT *
2 FROM Employees
3 WHERE City IN ('Delhi', 'Mumbai')
4   AND Salary > 55000;
5
```

Data Output Messages Notifications

	empid [PK] integer	empname character varying (50)	department character varying (50)	city character varying (50)	salary integer	hiredate date
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Explanation:

Two filters are applied: (1) City must be Delhi or Mumbai; (2) Salary > 55,000.

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

SQL Query:

The screenshot shows a SQL query editor interface. At the top, there are tabs for 'Query' and 'Query History'. Below the tabs is a code editor containing the following SQL query:

```
1 SELECT *
2 FROM Employees
3 WHERE Department <> 'HR';
4
```

Below the code editor is a toolbar with several icons. To the right of the toolbar is a table definition:

	empid [PK] integer	empname character varying (50)	department character varying (50)	city character varying (50)	salary integer	hiredate date
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Explanation:

The `<>` operator excludes HR employees.

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

SQL Query:

Query Query History

```
1 SELECT *
2 FROM Employees
3 WHERE HireDate BETWEEN '2019-01-01' AND '2022-12-31'
4 ORDER BY HireDate ASC;
5
```

Data Output Messages Notifications

	empid [PK] integer	empname character varying (50)	department character varying (50)	city character varying (50)	salary integer	hiredate date
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Explanation:

- BETWEEN is inclusive of both years.
- ORDER BY ASC shows the oldest employees first.