



ASSIGNMENT TITLE

Filtering and Sorting

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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 'Scratch Pad'. Below the tabs, the query code is displayed:

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

Below the code, there are tabs for 'Data Output', 'Messages', and 'Notifications'. Underneath these tabs is a toolbar with various icons. At the bottom, there is a table structure showing the columns 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:

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:



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 Department IN ('Sales', 'IT', 'Finance');
4
```

Below the code editor is a toolbar with icons for saving, opening, and other database operations. 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:

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:

The screenshot shows a SQL query editor interface. At the top, there's a tab labeled "Query" followed by "Query History". Below this, the query code is displayed:

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

Below the code, there are tabs for "Data Output", "Messages", and "Notifications". Under "Data Output", there is a table schema view:

	empid [PK] integer	empname character varying (50)	department character varying (50)	city character varying (50)	salary integer	hiredate date
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The table has seven columns: empid, empname, department, city, salary, and hiredate. The first column is a primary key (PK) of type integer. The other five columns are character varying (50). There are edit icons next to each column header.

Explanation:

The BETWEEN operator is inclusive of both boundary values.

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

SQL Query:

Query Query History

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

Data Output Messages Notifications

SQL

	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:

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 area containing the following SQL query:

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

Below the code area is a toolbar with icons for Data Output, Messages, and Notifications. The "Data Output" tab is selected. Underneath 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:

%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:

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 the SQL code for the query. The code is as follows:

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

Below the code is a section titled 'Data Output' which contains a table schema. The table has columns: empid [PK] integer, empname character varying (50), department character varying (50), city character varying (50), salary integer, and hiredate date. Above the table schema are several icons for file operations like new, open, save, etc., and a 'SQL' button.

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' (which is selected) and 'Query History'. Below the tabs is a code area containing the following SQL statement:

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

Below the code area are three tabs: 'Data Output', 'Messages', and 'Notifications'. Underneath these tabs is a toolbar with several icons. To the right of the toolbar is a table definition showing the structure 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:

The `<>` operator excludes HR employees.

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

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 area containing the following SQL query:

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

Below the code area is a toolbar with icons for file operations like new, open, save, and copy. To the right of the toolbar is a 'SQL' button. At the bottom of the interface is a table representation of the 'Employees' schema:

	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.