

# DATABASE MANAGEMENT SYSTEM

## CS23332

### EXERCISE 5

#### RESTRICTING AND SORTING DATA

JOTHIKA K  
241801110

1. Create a query to display the last name and salary of employees earning more than 12000.

Language SQL Rows 10 Clear Command Find Tables Save Run

SELECT last\_name, salary FROM employees WHERE salary > 12000;

Results Explain Describe Saved SQL History

LAST_NAME	SALARY
Johnson	50000
Williams	55000
Smith	65000
Doe	60000

4 rows returned in 0.01 seconds Download

2. Create a query to display the employee last name and department number for employee number 176.

A screenshot of a SQL query editor. The query in the command window is:

```
1 SELECT last_name, department_id FROM employees WHERE employee_id = 176;
```

The results tab is selected, showing the message "no data found".

3. Display the employee last name, job ID, and start date of employees hired between February 20, 1998 and May 1, 1998. Order the query in ascending order by start date.(hints: between)

A screenshot of a SQL query editor. The query in the command window is:

```
1 SELECT last_name, job_id, hire_date FROM Employees WHERE hire_date BETWEEN
2 TO_DATE('20-FEB-1998','DD-MON-YYYY') AND TO_DATE('01-MAY-1998','DD-MON-YYYY') ORDER BY hire_date;
```

The results tab is selected, showing the message "no data found".

4. Create a query to display the last name and salary of employees whose salary is not in the range of 5000 and 12000. (hints: not between )

The screenshot shows a SQL query editor with the following details:

- Toolbar:** Includes icons for back, forward, search, and schema navigation.
- Query Area:** Displays the SQL code:

```
1 SELECT last_name, salary FROM employees WHERE salary NOT BETWEEN 5000 AND 12000;
```
- Results Tab:** Active tab, showing the output of the query.
- Table Output:** A grid showing the last names and salaries of employees whose salaries are not between 5000 and 12000.

LAST_NAME	SALARY
Johnson	50000
Williams	55000
Smith	65000
Doe	60000
- Performance Metrics:** "4 rows returned in 0.01 seconds" and a "Download" link.

5. Display the last name and department number of all employees in departments 20 and 50 in alphabetical order by name.(hints: in, orderby)

The screenshot shows a MySQL command-line interface. At the top, there are icons for back, forward, search, and other functions. Below the interface, the SQL query is displayed:

```
1  SELECT last_name, department_id FROM employees
2  WHERE department_id IN (20, 50)
3  ORDER BY last_name ASC;
```

Below the query, there are tabs for Results, Explain, Describe, Saved SQL, and History. The Results tab is selected. The results table has two columns: LAST\_NAME and DEPARTMENT\_ID. One row is shown: Johnson, 20. At the bottom, it says "rows returned in 0.02 seconds" and "Download".

LAST_NAME	DEPARTMENT_ID
Johnson	20

rows returned in 0.02 seconds      Download

6. Display the last name and salary of all employees who earn between 5000 and 12000 and are in departments 20 and 50 in alphabetical order by name. Label the columns EMPLOYEE,MONTHLY SALARY respectively.(hints: between, in)

The screenshot shows a SQL editor interface with a dark theme. At the top, there are several icons: a refresh, a search, a save, and an order. Below the toolbar, the SQL query is displayed in a code editor:

```
1  SELECT
2      last_name AS EMPLOYEE,
3      salary AS "MONTHLY SALARY"
4  FROM employees
5  WHERE salary BETWEEN 5000 AND 12000
6      AND department_id IN (20, 50)
7  ORDER BY last_name ASC;
8
```

Below the code editor, there is a navigation bar with tabs: Results, Explain, Describe, Saved SQL, and History. The 'Results' tab is currently selected. Under the 'Results' tab, the text 'no data found' is displayed.

8. Display the last name and job title of all employees who do not have a manager.(hints: is

The screenshot shows a MySQL Workbench interface. The SQL tab contains the following code:

```
1  SELECT last_name
2  FROM employees
3  WHERE manager_id IS NULL;
4
```

The Results tab is selected, displaying the output:

LAST_NAME
Doe

Below the results, it says "1 rows returned in 0.00 seconds".

7. Display the last name and hire date of every employee who was hired in 1994.(hints: like)

The screenshot shows a SQL query interface with the following details:

- Query Editor:** The top section contains a code editor with the following SQL query:

```
1 SELECT last_name, hire_date
2 FROM employees
3 WHERE EXTRACT(YEAR FROM hire_date) = 2021;
4
```
- Results Tab:** The bottom section is titled "Results" and displays the query results in a table.
- Table Data:** The table has two columns: "LAST\_NAME" and "HIRE\_DATE". One row is shown, with "Johnson" in the LAST\_NAME column and "7/1/2021" in the HIRE\_DATE column.
- Performance Metrics:** At the bottom left, it says "rows returned in 0.00 seconds". At the bottom right, there is a "Download" link.