

DBMS EX - 6

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Exercise : 6

1. Write a query to display the current date. Label the column Date.

The screenshot shows a SQL query editor interface. At the top, there are buttons for Language (SQL), Rows (set to 10), Clear Command, and Find Tables. Below the input area, there are icons for Undo, Redo, Search, and Paste. The query itself is:

```
1 SELECT SYSDATE AS "Date"
2 FROM dual;
3
```

In the Results tab, the output is displayed in a single column labeled "Date". The value shown is 8/25/2025.

2. The HR department needs a report to display the employee number, last name, salary, and increased by 15.5% (expressed as a whole number) for each employee. Label the column New Salary.

The screenshot shows a SQL query editor interface. At the top, there are buttons for Language (SQL), Rows (set to 10), Clear Command, and Find Tables. Below the input area, there are icons for Undo, Redo, Search, and Paste. The query is:

```
1 SELECT employee_id,
2       last_name,
3       salary,
4       ROUND(salary * 1.155) AS "New Salary"
5   FROM employees;
```

In the Results tab, the output is a table with four columns: EMPLOYEE_ID, LAST_NAME, SALARY, and New Salary. The data is as follows:

EMPLOYEE_ID	LAST_NAME	SALARY	New Salary
300	Revere	55000	6325
1002	Doe	60000	69000
175	Auriel	7000	8661
176	Shakes	10000	11550

3. Modify your query lab_03_02.sql to add a column that subtracts the old salary from the new salary. Label the column Increase.

Language: SQL Rows: 10 Clear Command Find Tables

```

1 SELECT employee_id,
2      last_name,
3      salary,
4      ROUND(salary * 1.155) AS "New Salary",
5      ROUND(salary * 1.155) - salary AS Increase
6 FROM employees;

```

Results Explain Describe Saved SQL History

EMPLOYEE_ID	LAST_NAME	SALARY	New Salary	INCREASE
500	Revere	55000	63825	8825
1002	Doe	60000	69300	9300
175	Junior	7500	8665	1165
176	Shakes	10000	11550	1550

4. Write a query that displays the last name (with the first letter uppercase and all other letters lowercase) and the length of the last name for all employees whose name starts with the letters J, A, or M. Give each column an appropriate label. Sort the results by the employees' last names.

Language: SQL Rows: 10 Clear Command Find Tables

```

1 SELECT INITCAP(last_name) AS "Last Name",
2       LENGTH(last_name) AS "Name Length"
3 FROM employees
4 WHERE last_name LIKE 'J%'
5   OR last_name LIKE 'A%'
6   OR last_name LIKE 'M%'
7 ORDER BY last_name;

```

Results Explain Describe Saved SQL History

Last Name	Name Length
Junior	6

5. Rewrite the query so that the user is prompted to enter a letter that starts the last name. For example, if the user enters H when prompted for a letter, then the output should show all employees whose last name starts with the letter H.

Language: SQL Rows: 10 Clear Command Find Tables

```

1 SELECT INITCAP(last_name) AS "Last Name",
2       LENGTH(last_name) AS "Name Length"
3 FROM employees
4 WHERE last_name LIKE '%<?>%'
5 ORDER BY last_name;

```

Results Explain Describe Saved SQL History

Last Name	Name Length
Shakes	6

6. The HR department wants to find the length of employment for each employee. For each employee, display the last name and calculate the number of months between today and the date on which the employee was hired. Label the column MONTHS_WORKED. Order your results by the number of months employed. Round the number of months up to the closest whole number.

The screenshot shows a SQL query being run against a database. The query selects the last name, calculates the number of months between today and the hire date using the CEIL function, and orders the results by the calculated value in descending order. The results are displayed in a table with columns for LAST_NAME and MONTHS_WORKED.

LAST_NAME	MONTHS_WORKED
Revera	379
shakes	378
Junior	374
Doe	68

7. Create a report that produces the following for each employee:

<employee last name> earns <salary> monthly but wants <3 times salary>. Label the column Dream Salaries.

Language SQL Rows 10 Clear Command Find Tables

```
SELECT last_name || ' earns ' || salary ||
       ' monthly but wants ' || (salary*3) AS "Dream Salaries"
FROM employees;
```

Results Explain Describe Saved SQL History

Dream Salaries
Revera earns 55000 monthly but wants 165000
Doe earns 60000 monthly but wants 180000
Junior earns 7500 monthly but wants 22500
shakes earns 10000 monthly but wants 30000

8. Create a query to display the last name and salary for all employees. Format the salary to be 15 characters long, left-padded with the \$ symbol. Label the column SALARY.

Language SQL Rows 10 Clear Command Find Tables

```
SELECT last_name,
       LPAD(salary, 15, '$') AS SALARY
FROM employees;
```

Results Explain Describe Saved SQL History

LAST_NAME	SALARY
Revera	\$\$\$\$\$\$\$\$\$\$55000
Doe	\$\$\$\$\$\$\$\$\$\$60000
Junior	\$\$\$\$\$\$\$\$\$\$7500
shakes	\$\$\$\$\$\$\$\$\$\$10000

9. Display each employee's last name, hire date, and salary review date, which is the first Monday after six months of service. Label the column REVIEW. Format the dates to appear in the format similar to "Monday, the Thirty-First of July, 2000."

Language SQL Rows 10 Clear Command Find Tables

```

1 SELECT last_name,
2      hire_date,
3      TO_CHAR(
4          NEXT_DAY(ADD_MONTHS(hire_date, 6), 'MONDAY'),
5          'Day, "the" Ddspth "of" Month, YYYY'
6      ) AS REVIEW
7 FROM employees;

```

Results	Explain	Describe	Saved SQL	History
LAST_NAME	HIRE_DATE	REVIEW		
Revera	2/20/1994	Monday , the Twenty-Second of August , 1994		
Doe	1/15/2020	Monday , the Twentieth of July , 2020		
Junior	7/7/1994	Monday , the Ninth of January , 1995		
shakes	3/19/1994	Monday , the Twenty-Sixth of September, 1994		

10. Display the last name, hire date, and day of the week on which the employee started. Label the column DAY. Order the results by the day of the week, starting with Monday.

Language SQL Rows 10 Clear Command Find Tables

```

1 SELECT last_name,
2      hire_date,
3      TO_CHAR(hire_date, 'Day') AS DAY
4 FROM employees
5 ORDER BY TO_CHAR(hire_date, 'D');

```

Results	Explain	Describe	Saved SQL	History
LAST_NAME	HIRE_DATE	DAY		
Revera	2/21/1994	Monday		
Doe	1/15/2020	Wednesday		
Junior	7/3/1994	Thursday		
shakes	3/19/1994	Saturday		