

DBMS EX - 6

Name	Manjusri.N
Roll No	241801151
Department	AI & DS

Exercise : 6

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

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

- Language: SQL
- Rows: 10
- Query:

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

- Results tab is selected.
- Output:

Date
8/25/2025

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

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

- Language: SQL
- Rows: 10
- Query:

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

- Results tab is selected.
- Output:

EMPLOYEE_ID	LAST_NAME	SALARY	New Salary
300	Revere	55000	63525
1002	Doe	60000	69000
175	Junior	7500	8663
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.

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

- Language: SQL
- Rows: 10
- Query:

```
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 tab is selected.
- Output:

EMPLOYEE_ID	LAST_NAME	SALARY	New Salary	INCREASE
300	Revere	55000	63525	8525
1002	Doe	60000	69000	9000
175	Junior	7500	8663	1163
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.

The screenshot shows a SQL query being run against a database. The query selects the first letter of the last name in uppercase followed by the rest in lowercase, and the length of the last name for employees whose last name starts with J, A, or M. The results are sorted by last name. One row is shown: 'Junior' with a length of 6.

```
Language SQL Rows 10 Clear Command Find Tables  
C Q A  
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.

The screenshot shows a SQL query being run against a database. The query is identical to the one in question 4, but it includes a placeholder '%s' in the WHERE clause to prompt the user for input. The results are sorted by last name. One row is shown: 'Shakes' with a length of 6.

```
Language SQL Rows 10 Clear Command Find Tables  
C Q A  
1 SELECT INITCAP(last_name) AS "Last Name",  
2      LENGTH(last_name) AS "Name Length"  
3 FROM employees  
4 WHERE last_name LIKE "%s%"  
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 interface with the following details:

Language: SQL

Rows: 10

Query:

```
1 SELECT last_name,
2        CEIL(MONTHS_BETWEEN(SYSDATE, hire_date)) AS "MONTHS_WORKED"
3 FROM employees
4 ORDER BY "MONTHS_WORKED" DESC;
```

Results:

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.

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

Language: SQL

Rows: 10

Query:

```
1 SELECT last_name || ' earns ' || salary ||
2       ' monthly but wants ' || (salary*3) AS "Dream Salaries"
3 FROM employees;
4
```

Results:

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.

The screenshot shows a SQL query being run against a database. The query is:

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

The results table has columns LAST_NAME and SALARY. The data is:

LAST_NAME	SALARY
Revera	\$\$\$\$\$\$\$\$\$\$55000
Doe	\$\$\$\$\$\$\$\$\$\$60000
Junior	\$\$\$\$\$\$\$\$\$\$75000
shakes	\$\$\$\$\$\$\$\$\$\$100000

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."

The screenshot shows a SQL query being run against a database. The query is:

```
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;
```

The results table has columns LAST_NAME, HIRE_DATE, and REVIEW. The data is:

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.

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

Language: SQL

Rows: 10

Clear Command and **Find tables** buttons

SQL Query:

```
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:

LAST_NAME	HIRE_DATE	DAY
Revera	2/21/1994	Monday
Doe	1/15/2020	Wednesday
Junior	3/3/1994	Thursday
shakes	3/19/1994	Saturday