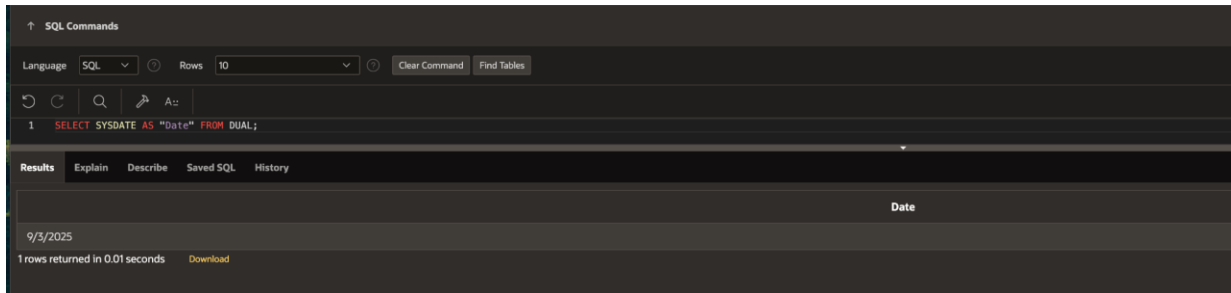


EXERCISE-6

Single Row Functions

NAME	PRATHESHA J
ROLL NO	241001172
DEPARTMENT	IT

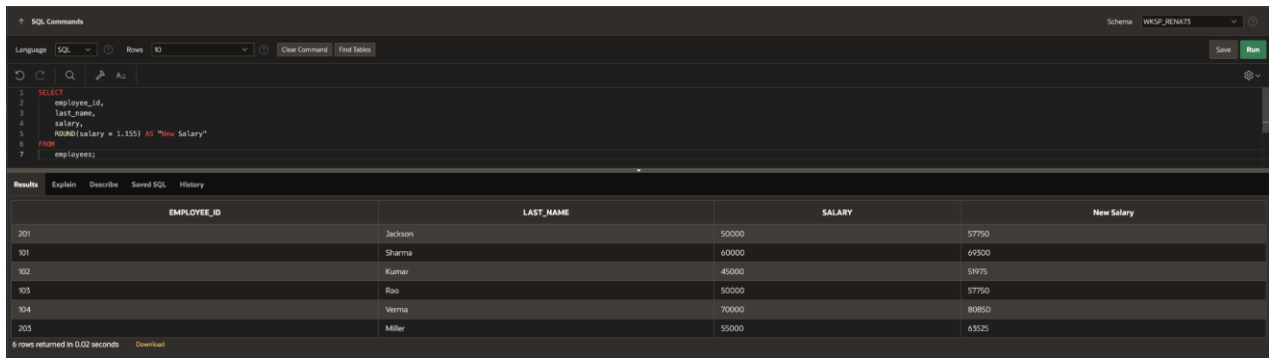
1 .Write a query to display the current date. Label the column Date.



The screenshot shows a SQL interface with the following details:

- SQL Commands:** Language: SQL, Rows: 10, Clear Command, Find Tables.
- Query:** `1 SELECT SYSDATE AS "Date" FROM DUAL;`
- Results:** Explain, Describe, Saved SQL, History.
- Output:** A single row with the value `9/3/2025` under the column `Date`.
- Footer:** 1 rows returned in 0.01 seconds, Download.

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.



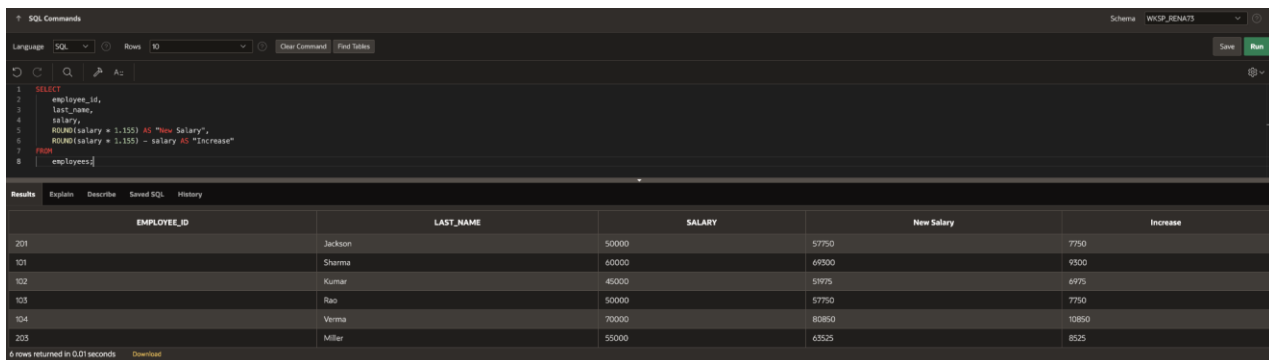
The screenshot shows a SQL interface with the following details:

- SQL Commands:** Language: SQL, Rows: 10, Clear Command, Find Tables, Save, Run.
- Query:** `1 SELECT
2 employee_id,
3 last_name,
4 salary,
5 ROUND(salary * 1.155) AS "New Salary"
6 FROM
7 employees;`
- Results:** Explain, Describe, Saved SQL, History.
- Output Table:**

EMPLOYEE_ID	LAST_NAME	SALARY	New Salary
201	Jackson	50000	57750
101	Sharma	60000	69300
102	Kumar	45000	51975
103	Rao	50000	57750
104	Verma	70000	80850
205	Miller	55000	63525

- Footer:** 6 rows returned in 0.02 seconds, Download.

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 interface with the following details:

- SQL Commands:** Language: SQL, Rows: 10, Clear Command, Find Tables, Save, Run.
- Query:** `1 SELECT
2 employee_id,
3 last_name,
4 salary,
5 ROUND(salary * 1.155) AS "New Salary",
6 ROUND(salary * 1.155) - salary AS "Increase"
7 FROM
8 employees;`
- Results:** Explain, Describe, Saved SQL, History.
- Output Table:**

EMPLOYEE_ID	LAST_NAME	SALARY	New Salary	Increase
201	Jackson	50000	57750	7750
101	Sharma	60000	69300	9300
102	Kumar	45000	51975	6975
103	Rao	50000	57750	7750
104	Verma	70000	80850	10850
205	Miller	55000	63525	8525

- Footer:** 6 rows returned in 0.01 seconds, Download.

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.

SQL Commands

Language: SQL Rows: 10

```

1 SELECT
2   INITCAP(last_name) AS "Formatted Last Name",
3   LENGTH(last_name) AS "Name Length"
4 FROM
5   employees
6 WHERE
7   UPPER(SUBSTR(last_name, 1, 1)) IN ('A', 'M')
8 ORDER BY
9   last_name;

```

Results

Formatted Last Name	Name Length
Jackson	7
Miller	6

2 rows returned in 0.01 seconds

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.

SQL Commands

Language: SQL Rows: 10

```

1 SELECT
2   INITCAP(last_name) AS "Formatted Last Name",
3   LENGTH(last_name) AS "Name Length"
4 FROM
5   employees
6 WHERE
7   SUBSTR(UPPER(last_name), 1, 1) = UPPER('&letter')
8 ORDER BY
9   last_name;

```

Results

no data found

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.

SQL Commands

Language: SQL Rows: 10

```

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

```

Results Explain Describe Saved SQL History

LAST_NAME	MONTHS_WORKED
Kumar	78
Sharma	68
Jackson	68
Miller	50
Rao	50
Verma	34

6 rows returned in 0.00 seconds [Download](#)

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.

SQL Commands

Language: SQL Rows: 10

```

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

```

Results Explain Describe Saved SQL History

Dream Salaries
Jackson earns 50000 monthly but wants 150000
Sharma earns 60000 monthly but wants 180000
Kumar earns 45000 monthly but wants 135000
Rao earns 50000 monthly but wants 150000
Verma earns 70000 monthly but wants 210000
Miller earns 55000 monthly but wants 165000

6 rows returned in 0.01 seconds [Download](#)

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.

SQL Commands

Language: SQL Rows: 10

```

1 SELECT
2   last_name,
3   LPAD(TO_CHAR(salary), 15, '$') AS "SALARY"
4 FROM
5   employees;

```

Results Explain Describe Saved SQL History

LAST_NAME	SALARY
Jackson	\$\$\$\$\$\$\$\$\$50000
Sharma	\$\$\$\$\$\$\$\$\$60000
Kumar	\$\$\$\$\$\$\$\$\$45000
Rao	\$\$\$\$\$\$\$\$\$50000
Verma	\$\$\$\$\$\$\$\$\$70000
Miller	\$\$\$\$\$\$\$\$\$55000

6 rows returned in 0.02 seconds [Download](#)

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 the SQL Developer interface with the following query:

```

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

```

The results table displays the following data:

LAST_NAME	Hire Date	REVIEW
Jackson	Wednesday, the Fifteenth of January, 2020	Monday, the Twentieth of July, 2020
Sharma	Wednesday, the Fifteenth of January, 2020	Monday, the Twentieth of July, 2020
Kumar	Sunday, the Tenth of March, 2019	Monday, the Sixteenth of September, 2019
Rao	Monday, the Fifth of July, 2021	Monday, the Tenth of January, 2022
Verma	Sunday, the Twentieth of November, 2022	Monday, the Twenty-Second of May, 2023
Miller	Saturday, the Tenth of July, 2021	Monday, the Seventeenth of January, 2022

6 rows returned in 0.01 seconds

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 the SQL Developer interface with the following query:

```

1 SELECT
2   last_name,
3   hire_date,
4   TO_CHAR(hire_date, 'DAY') AS "DAY"
5 FROM
6   employees
7 ORDER BY
8   TO_CHAR(hire_date, 'DAY');

```

The results table displays the following data:

LAST_NAME	HIRE_DATE	DAY
Kumar	3/10/2019	SUNDAY
Verma	11/20/2022	SUNDAY
Rao	7/5/2021	MONDAY
Sharma	1/15/2020	WEDNESDAY
Jackson	1/15/2020	WEDNESDAY
Miller	7/10/2021	SATURDAY

6 rows returned in 0.01 seconds