

EXERCISE-5

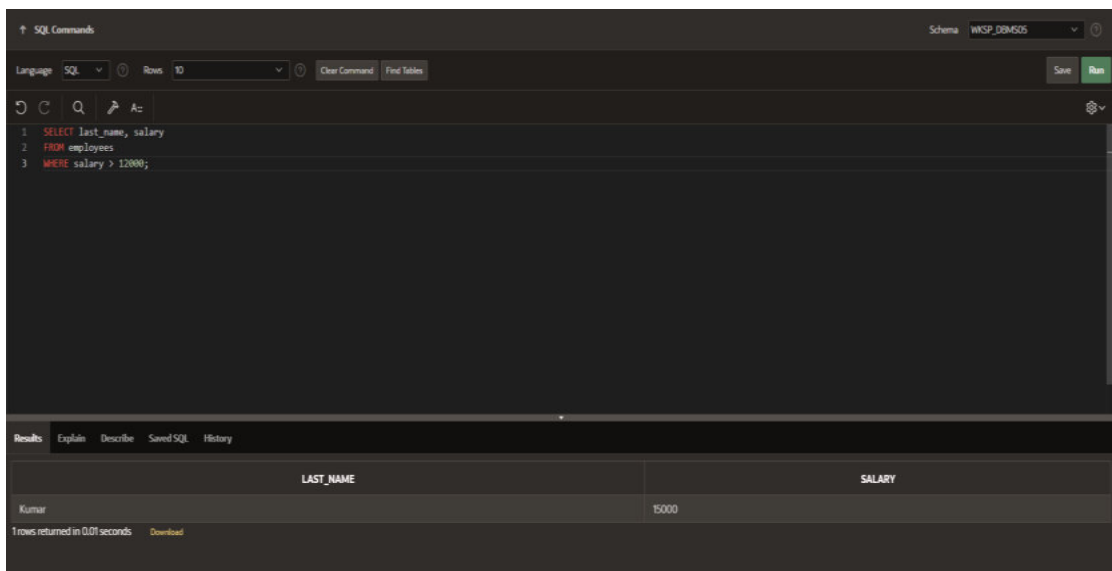
Restricting and Sorting data

Name: Vedhasree S

Register Number: 240701580

Department: CSE

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



The screenshot shows the SQL Developer interface. The SQL Command window contains the following query:

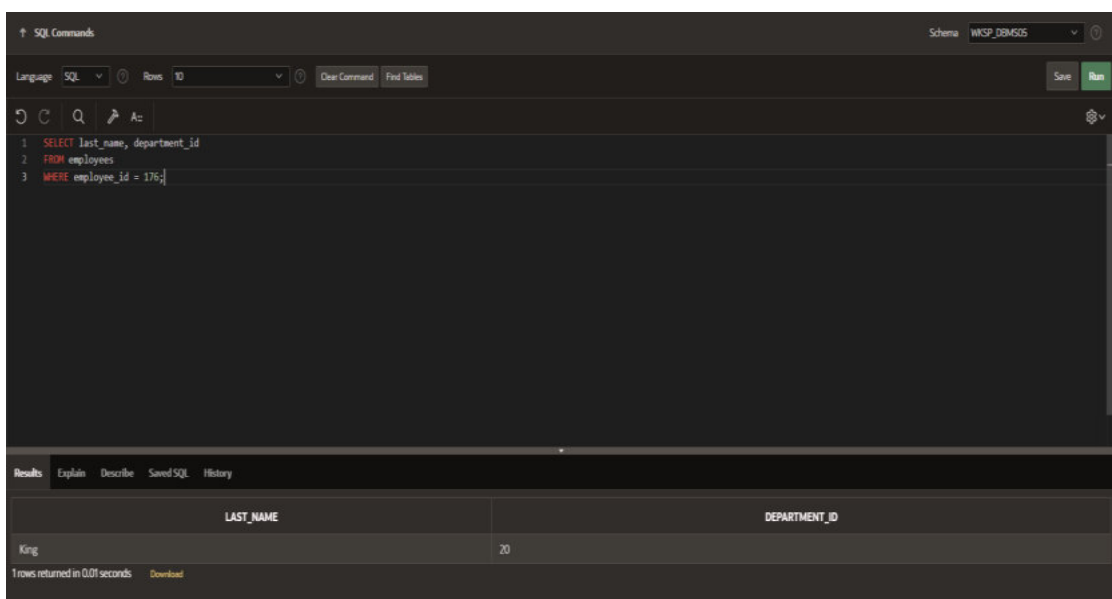
```
1 SELECT last_name, salary
2 FROM employees
3 WHERE salary > 12000;
```

The Results window displays the following data:

| LAST_NAME | SALARY |
|-----------|--------|
| Kumar | 15000 |

Rows returned in 0.01 seconds. Download

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



The screenshot shows the SQL Developer interface. The SQL Command window contains the following query:

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

The Results window displays the following data:

| LAST_NAME | DEPARTMENT_ID |
|-----------|---------------|
| King | 20 |

Rows returned in 0.01 seconds. Download

3. 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 the SQL Developer interface with the following SQL query:

```
1 SELECT last_name, salary
2 FROM employees
3 WHERE salary NOT BETWEEN 5000 AND 12000;
```

The results are displayed in a table with two columns: LAST_NAME and SALARY.

| LAST_NAME | SALARY |
|-----------|--------|
| Adams | 4000 |
| Brown | 4500 |
| Kumar | 15000 |

3 rows returned in 0.00 seconds

4. 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)

The screenshot shows the SQL Developer interface with the following SQL query:

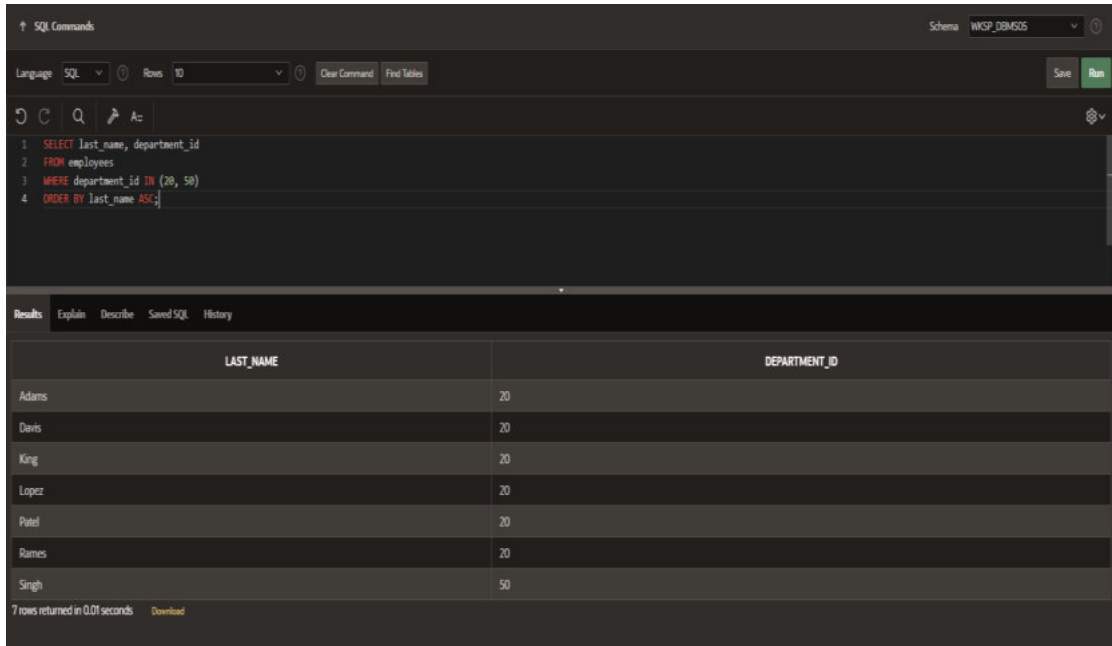
```
1 SELECT last_name, job_id, hire_date AS start_date
2 FROM employees
3 WHERE hire_date BETWEEN TO_DATE('1998-02-20', 'YYYY-MM-DD') AND TO_DATE('1998-05-01', 'YYYY-MM-DD')
4 ORDER BY hire_date ASC;
```

The results are displayed in a table with three columns: LAST_NAME, JOB_ID, and START_DATE.

| LAST_NAME | JOB_ID | START_DATE |
|-----------|--------|------------|
| Lopez | HR_REP | 3/5/1998 |

1 rows returned in 0.00 seconds

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 the SQL Developer interface with the following SQL query:

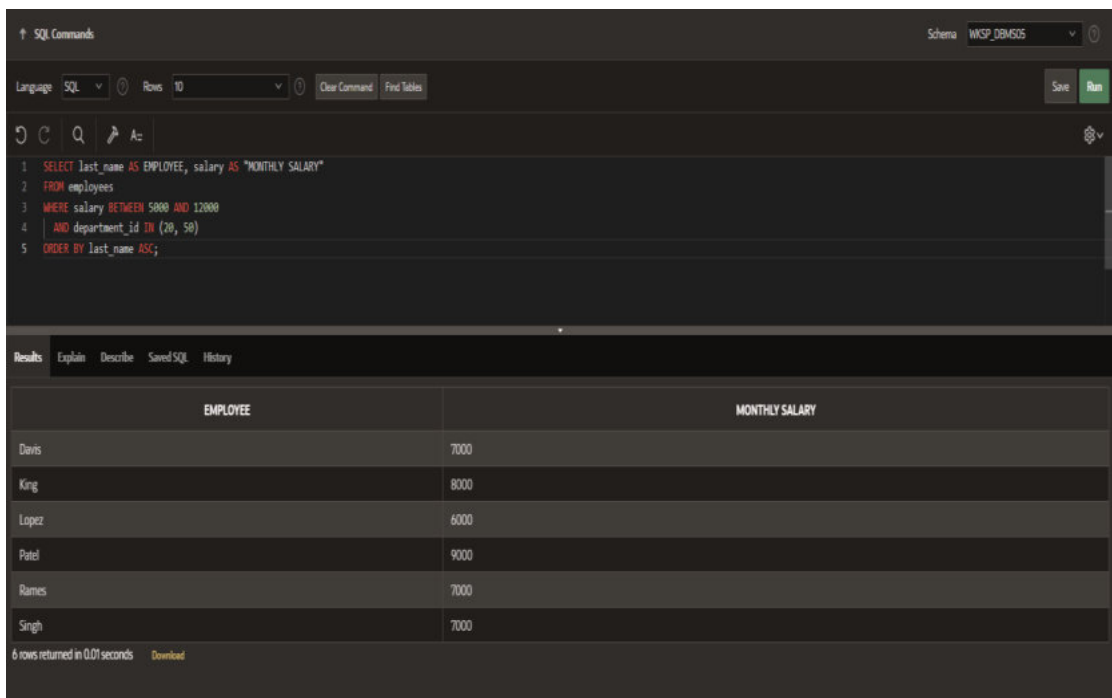
```
1 SELECT last_name, department_id
2 FROM employees
3 WHERE department_id IN (20, 50)
4 ORDER BY last_name ASC;
```

The results are displayed in a table with two columns: LAST_NAME and DEPARTMENT_ID. The data is as follows:

| LAST_NAME | DEPARTMENT_ID |
|-----------|---------------|
| Adams | 20 |
| Davis | 20 |
| King | 20 |
| Lopez | 20 |
| Patel | 20 |
| Rames | 20 |
| Singh | 50 |

7 rows returned in 0.01 seconds

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 the SQL Developer interface with the following SQL query:

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

The results are displayed in a table with two columns: EMPLOYEE and MONTHLY SALARY. The data is as follows:

| EMPLOYEE | MONTHLY SALARY |
|----------|----------------|
| Davis | 7000 |
| King | 8000 |
| Lopez | 6000 |
| Patel | 9000 |
| Rames | 7000 |
| Singh | 7000 |

6 rows returned in 0.01 seconds

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

The screenshot shows the APEX SQL Workshop interface. The SQL Commands tab is active, displaying the following query:

```
1 SELECT last_name, hire_date
2 FROM employees
3 WHERE TO_CHAR(hire_date, 'YYYY') LIKE '1994';
```

The Results tab is also active, showing a table with two columns: LAST_NAME and HIRE_DATE. The table contains one row: Davis, 7/12/1994. Below the table, it states "1 rows returned in 0.01 seconds" and provides a "Download" link.

| LAST_NAME | HIRE_DATE |
|-----------|-----------|
| Davis | 7/12/1994 |

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

The screenshot shows the APEX SQL Workshop interface. The SQL Commands tab is active, displaying the following query:

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

The Results tab is also active, showing a table with two columns: LAST_NAME and JOB_ID. The table contains six rows: Smith (IT_PROG), Singh (SA_REP), Davis (SA_REP), King (SA_REP), Rames (SA_REP), and Patel (SA_REP). Below the table, it states "6 rows returned in 0.01 seconds" and provides a "Download" link.

| LAST_NAME | JOB_ID |
|-----------|---------|
| Smith | IT_PROG |
| Singh | SA_REP |
| Davis | SA_REP |
| King | SA_REP |
| Rames | SA_REP |
| Patel | SA_REP |

9. Display the last name, salary, and commission for all employees who earn commissions. Sort data in descending order of salary and commissions. (hints: is not null, orderby)

The screenshot shows the SQL Workshop interface with the following SQL query:

```
1 SELECT last_name, salary, commission
2 FROM employees
3 WHERE commission IS NOT NULL
4 ORDER BY salary DESC, commission DESC;
```

The results are displayed in a table with the following data:

| LAST_NAME | SALARY | COMMISSION |
|-----------|--------|------------|
| Patel | 9000 | .2 |
| King | 8000 | .1 |
| Rames | 7000 | .05 |
| Lopez | 6000 | .15 |

4 rows returned in 0.00 seconds

10. Display the last name of all employees where the third letter of the name is *a*. (hints: like)

The screenshot shows the SQL Workshop interface with the following SQL query:

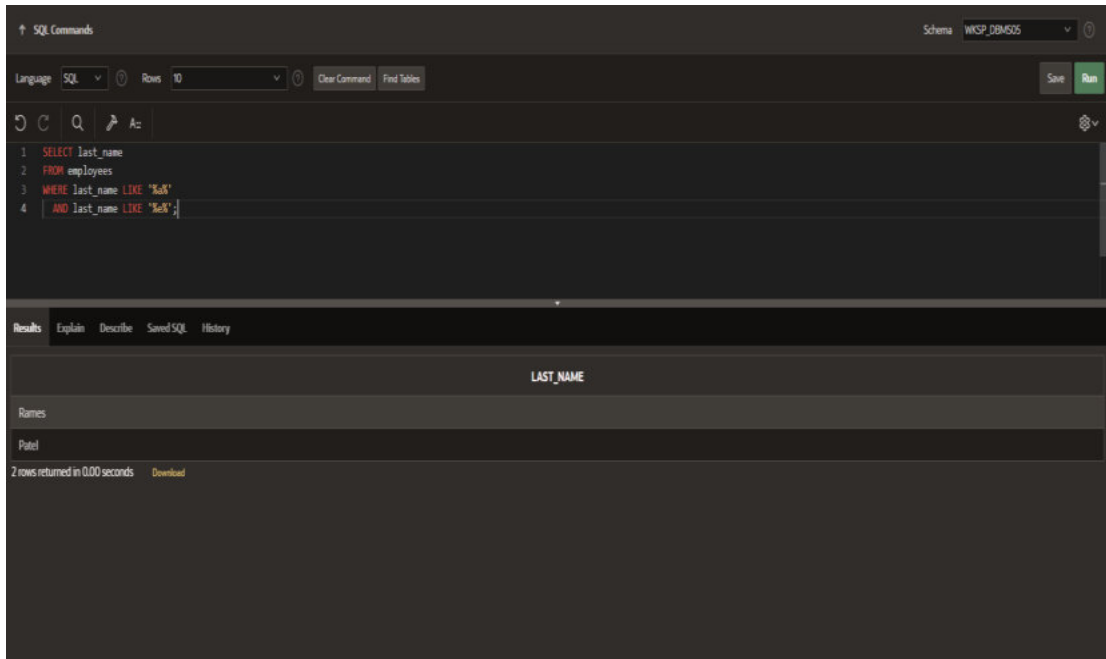
```
1 SELECT last_name
2 FROM employees
3 WHERE last_name LIKE '___a%';
```

The results are displayed in a table with the following data:

| LAST_NAME |
|-----------|
| Adams |

1 rows returned in 0.01 seconds

11. Display the last name of all employees who have an a and an e in their last name. (hints: like)



The screenshot shows the SQL Developer interface with the following SQL query entered in the command window:

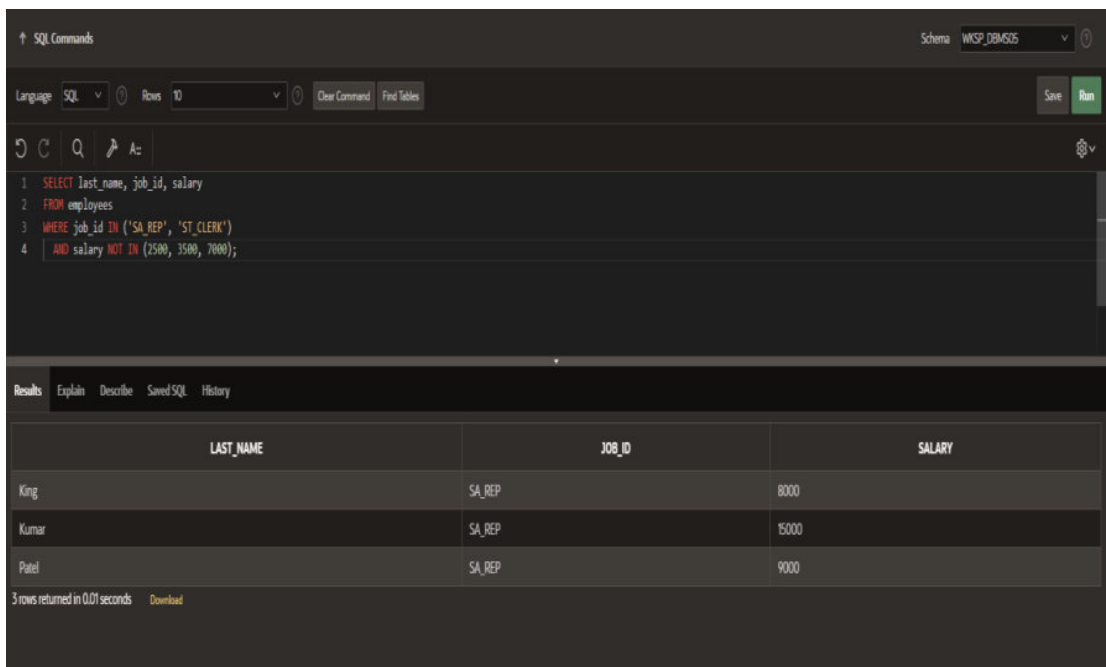
```
1 SELECT last_name
2 FROM employees
3 WHERE last_name LIKE '%a%'
4 AND last_name LIKE '%e%';
```

The results pane shows the following output:

| LAST_NAME |
|-----------|
| Rames |
| Patel |

2 rows returned in 0.00 seconds

12. Display the last name and job and salary for all employees whose job is sales representative or stock clerk and whose salary is not equal to 2500 ,3500 or 7000. (hints: in, not in)



The screenshot shows the SQL Developer interface with the following SQL query entered in the command window:

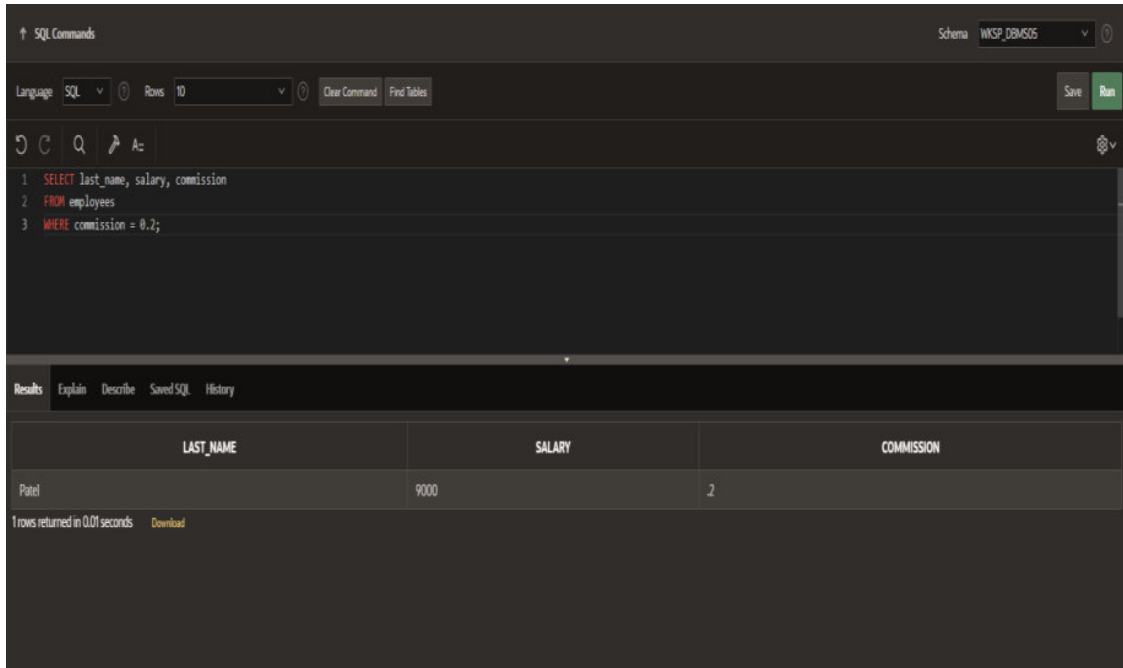
```
1 SELECT last_name, job_id, salary
2 FROM employees
3 WHERE job_id IN ('SA_REP', 'ST_CLERK')
4 AND salary NOT IN (2500, 3500, 7000);
```

The results pane shows the following output:

| LAST_NAME | JOB_ID | SALARY |
|-----------|--------|--------|
| King | SA_REP | 8000 |
| Kumar | SA_REP | 15000 |
| Patel | SA_REP | 9000 |

3 rows returned in 0.01 seconds

13. Display the last name, salary, and commission for all employees whose commission amount is 20%. (hints: use predicate logic)



The screenshot shows a SQL IDE interface. At the top, there's a 'SQL Commands' tab and a 'Schema' dropdown set to 'WKSP_DBMS05'. Below this, a toolbar includes 'Language' (set to SQL), 'Rows' (set to 10), 'Clear Command', 'Find Tables', 'Save', and 'Run'. The main editor area contains the following SQL query:

```
1 SELECT last_name, salary, commission
2 FROM employees
3 WHERE commission = 0.2;
```

Below the editor, there's a 'Results' tab with sub-tabs 'Explain', 'Describe', 'Saved SQL', and 'History'. The 'Results' tab is active, displaying a table with three columns: 'LAST_NAME', 'SALARY', and 'COMMISSION'. The table contains one row with the values 'Patel', '9000', and '.2'. At the bottom of the results area, it says '1 rows returned in 0.01 seconds' and has a 'Download' link.

| LAST_NAME | SALARY | COMMISSION |
|-----------|--------|------------|
| Patel | 9000 | .2 |

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