

## EXERCISE - 5

### Restricting and Sorting Data

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

```
SELECT LAST_NAME, EMP_SALARY FROM EMPLOYEES WHERE EMP_SALARY > 12000;
```

### OUTPUT:

The screenshot shows the Oracle APEX SQL Workshop interface. At the top, there are tabs for 'ORACLE APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'App Gallery'. Below these, there's a 'Schema' dropdown set to 'IN\_A225\_SQL\_S19'. The 'SQL Commands' section shows a query: 'SELECT LAST\_NAME, EMP\_SALARY FROM EMPLOYEES WHERE EMP\_SALARY > 12000;'. Below the query, there's a 'Results' tab with a table showing the output. The table has two columns: 'LAST\_NAME' and 'EMP\_SALARY'. The results are: Shirley (20000) and Warner (500000). At the bottom, it says '2 rows returned in 0.00 seconds' and there's a 'Download' link.

LAST_NAME	EMP_SALARY
Shirley	20000
Warner	500000

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

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

```
SELECT LAST_NAME, DEPT_NUMBER FROM EMPLOYEES WHERE EMPLOYEE_NUMBER = 176;
```

### OUTPUT:

ORACLE APEX App Builder SQL Workshop Team Development App Gallery

Schema IN\_A225\_SQL\_S19

SQL Commands

Rows 10 Clear Command Find Tables Save Run

```
SELECT LAST_NAME, DEPT_NUMBER FROM EMPLOYEES WHERE EMPLOYEE_NUMBER = 176;
```

Results Explain Describe Saved SQL History

LAST_NAME	DEPT_NUMBER
Warner	50

1 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.

```
SELECT LAST_NAME, EMP_SALARY FROM EMPLOYEES WHERE EMP_SALARY
NOT BETWEEN 5000 AND 12000;
```

## OUTPUT:

ORACLE APEX App Builder SQL Workshop Team Development App Gallery

Schema IN\_A225\_SQL\_S19

SQL Commands

Rows 10 Clear Command Find Tables Save Run

```
SELECT LAST_NAME, EMP_SALARY FROM EMPLOYEES WHERE EMP_SALARY NOT BETWEEN 5000 AND 12000;
```

Results Explain Describe Saved SQL History

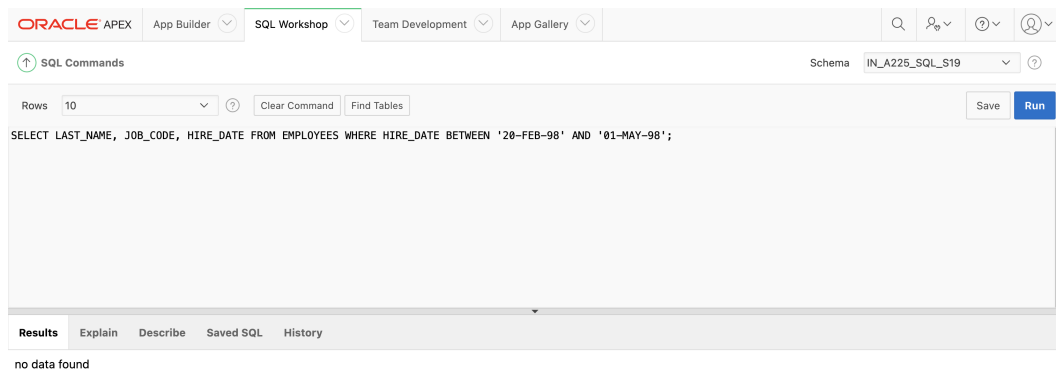
LAST_NAME	EMP_SALARY
Shirley	20000
Warner	500000

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

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.

```
SELECT LAST_NAME, JOB_CODE, HIRE_DATE FROM EMPLOYEES WHERE HIRE_DATE  
BETWEEN '20-FEB-98' AND '01-MAY-98';
```

## OUTPUT:



5. Display the last name and department number of all employees in departments 20 and 50 in alphabetical order by name.

```
SELECT LAST_NAME, DEPT_NUMBER FROM EMPLOYEES WHERE DEPT_NUMBER  
BETWEEN 20 AND 50 ORDER BY LAST_NAME;
```

## OUTPUT:

ORACLE APEX App Builder SQL Workshop Team Development App Gallery

SQL Commands Schema IN\_A225\_SQL\_S19

Rows 10 Clear Command Find Tables Save Run

```
SELECT LAST_NAME, DEPT_NUMBER FROM EMPLOYEES WHERE DEPT_NUMBER BETWEEN 20 AND 50 ORDER BY LAST_NAME;
```

Results Explain Describe Saved SQL History

LAST_NAME	DEPT_NUMBER
Blythe	20
Warner	50

2 rows returned in 0.00 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.

```
SELECT LAST_NAME "EMPLOYEE", EMP_SALARY "MONTHLY SALARY" FROM
EMPLOYEES WHERE EMP_SALARY BETWEEN 5000 AND 12000 AND
DEPT_NUMBER BETWEEN 20 AND 50 ORDER BY LAST_NAME;
```

## OUTPUT:

ORACLE APEX App Builder SQL Workshop Team Development App Gallery

SQL Commands Schema IN\_A225\_SQL\_S19

Rows 10 Clear Command Find Tables Save Run

```
SELECT LAST_NAME "EMPLOYEE", EMP_SALARY "MONTHLY SALARY" FROM EMPLOYEES WHERE EMP_SALARY BETWEEN 5000 AND 12000 AND DEPT_NUMBER BETWEEN 20 AND 50 ORDER BY LAST_NAME;
```

Results Explain Describe Saved SQL History

EMPLOYEE	MONTHLY SALARY
Blythe	11000

1 rows returned in 0.01 seconds Download

7. Display the last name and hire date of every employee who was hired in 1994.

```
SELECT LAST_NAME, HIRE_DATE FROM EMPLOYEES WHERE HIRE_DATE LIKE '%1994';
```

## OUTPUT:

The screenshot shows the Oracle APEX SQL Workshop interface. At the top, there are tabs for 'App Builder', 'SQL Workshop', 'Team Development', and 'App Gallery'. The 'SQL Workshop' tab is active. Below the tabs, there is a search bar and a 'Schema' dropdown menu set to 'IN\_A225\_SQL\_S19'. The main area contains a text input field with the SQL query: `SELECT LAST_NAME, HIRE_DATE FROM EMPLOYEES WHERE HIRE_DATE LIKE '%1994';`. Below the input field, there are buttons for 'Clear Command', 'Find Tables', 'Save', and 'Run'. The 'Run' button is highlighted in blue. Below the input field, there is a tabbed interface with 'Results', 'Explain', 'Describe', 'Saved SQL', and 'History'. The 'Results' tab is active, showing a table with two columns: 'LAST\_NAME' and 'HIRE\_DATE'. The table contains one row with the values 'Cuthbert' and '21-Feb-1994'. Below the table, it says '1 rows returned in 0.01 seconds' and there is a 'Download' link.

LAST_NAME	HIRE_DATE
Cuthbert	21-Feb-1994

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

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

```
SELECT LAST_NAME, JOB_CODE FROM EMPLOYEES WHERE MANAGER_ID IS NULL;
```

## OUTPUT:

ORACLE APEX App Builder SQL Workshop Team Development App Gallery

SQL Commands Schema IN\_A225\_SQL\_S19

Rows 10 Clear Command Find Tables Save Run

```
SELECT LAST_NAME, JOB_CODE FROM EMPLOYEES WHERE MANAGER_ID IS NULL;
```

Results Explain Describe Saved SQL History

LAST_NAME	JOB_CODE
Blythe	300
Shirley	301
Cuthbert	302
Warner	303

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

9. Display the last name, salary, and commission for all employees who earn commissions.  
Sort data in descending order of salary and commissions.

```
SELECT LAST_NAME, EMP_SALARY, COMMISSION_PCT FROM EMPLOYEES  
WHERE COMMISSION_PCT IS NOT NULL ORDER BY EMP_SALARY, COMMISSION_PCT DESC;
```

**OUTPUT:**

ORACLE APEX App Builder SQL Workshop Team Development App Gallery

SQL Commands Schema IN\_A225\_SQL\_S19

Rows 10 Clear Command Find Tables Save Run

```
SELECT LAST_NAME, EMP_SALARY, COMMISSION_PCT FROM EMPLOYEES WHERE COMMISSION_PCT IS NOT NULL ORDER BY EMP_SALARY, COMMISSION_PCT DESC;
```

Results Explain Describe Saved SQL History

LAST_NAME	EMP_SALARY	COMMISSION_PCT
Blythe	11000	7
Shirley	20000	7

2 rows returned in 0.00 seconds Download

10. Display the last name of all employees where the third letter of the name is **a**.

```
SELECT LAST_NAME FROM EMPLOYEES WHERE LAST_NAME LIKE '___a%';
```

## OUTPUT:

ORACLE APEX App Builder SQL Workshop Team Development App Gallery

SQL Commands Schema IN\_A225\_SQL\_S19

Rows 10 Clear Command Find Tables Save Run

```
SELECT LAST_NAME FROM EMPLOYEES WHERE LAST_NAME LIKE '___a%';
```

Results Explain Describe Saved SQL History

no data found

11. Display the last name of all employees who have an a and an e in their last name.

```
SELECT LAST_NAME FROM EMPLOYEES WHERE LAST_NAME LIKE '%a%' AND  
LAST_NAME LIKE '%e%';
```

## OUTPUT:

The screenshot shows the Oracle APEX SQL Workshop interface. The top navigation bar includes 'ORACLE APEX', 'App Builder', 'SQL Workshop' (selected), 'Team Development', and 'App Gallery'. The 'SQL Commands' tab is active, and the schema is set to 'IN\_A225\_SQL\_S19'. The SQL command entered is: `SELECT LAST_NAME FROM EMPLOYEES WHERE LAST_NAME LIKE '%a%' AND LAST_NAME LIKE '%e%';`. The 'Run' button is highlighted. Below the command, the 'Results' tab is selected, showing a single row with the last name 'Warner'. The status bar at the bottom indicates '1 rows returned in 0.01 seconds'.

LAST_NAME
Warner

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.

```
SELECT LAST_NAME, JOB_CODE, EMP_SALARY FROM EMPLOYEES WHERE  
JOB_TITLE IN ('sales representative', 'stock clerk') AND  
EMP_SALARY NOT IN (2500, 3500, 7000);
```

## OUTPUT:



ORACLE APEX App Builder SQL Workshop Team Development App Gallery

SQL Commands Schema IN\_A225\_SQL\_S19

Rows 10 Clear Command Find Tables Save Run

```
SELECT LAST_NAME, JOB_CODE, EMP_SALARY FROM EMPLOYEES WHERE JOB_TITLE IN ('sales representative', 'stock clerk') AND EMP_SALARY NOT IN (2500, 3500, 7000);
```

Results Explain Describe Saved SQL History

LAST_NAME	JOB_CODE	EMP_SALARY
Shirley	301	20000
Cuthbert	302	10000
Warner	303	500000

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

13. Display the last name, salary, and commission for all employees whose commission amount is 20%.

```
SELECT LAST_NAME, EMP_SALARY, COMMISSION_PCT FROM EMPLOYEES WHERE COMMISSION_PCT = 20;
```

## OUTPUT:

ORACLE APEX App Builder SQL Workshop Team Development App Gallery

SQL Commands Schema IN\_A225\_SQL\_S19

Rows 10 Clear Command Find Tables Save Run

```
SELECT LAST_NAME, EMP_SALARY, COMMISSION_PCT FROM EMPLOYEES WHERE COMMISSION_PCT = 20;
```

Results Explain Describe Saved SQL History

LAST_NAME	EMP_SALARY	COMMISSION_PCT
Warner	500000	20

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