Ex.No.: 6	RESTRICTING AND SORTING DATA
Date: 20/08/2024	

After the completion of this exercise, the students will be able to do the following:

- Limit the rows retrieved by the queries
- Sort the rows retrieved by the queries
-

Limiting the Rows selected

- Using WHERE clause
- Alias cannot used in WHERE clause

Syntax

SELECT----------
FROM----------
WHERE condition;

Example:

SELECT employee_id,last_name, job_id, deparment_id FROM employees WHERE department_id=90;

Character strings and Dates

Character strings and date values are enclosed in single quotation marks.

Character values are case sensitive and date values are format sensitive.

Example:

SELECT employee_id,last_name, job_id, deparment_id FROM employees
WHERE last_name='WHALEN";

Comparison Conditions

All relational operators can be used. (=, >, >=, <, <= ,<>,!=)

Example:

SELECT last_name, salary

```
SELECT last_name, salary*12 annsal , job_id,department_id,hire_date
FROM employees
ORDER BY annsal;
```

Example:4
Sorting by Multiple columns

```
SELECT last_name, salary , job_id,department_id,hire_date
FROM employees
ORDER BY department_id, salary DESC;
```

Find the Solution for the following:

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

```
SELECT last_name,salary
FROM employees
WHERE salary >12000;
```

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

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

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)

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

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)

```
SELECT last_name, job_id, hire_date
FROMemployees
WHERE hire_date BETWEEN '20-FEB-1998' AND
'01-MAY-1998'ORDERBY hire_date;
```

5. Display the last name and department number of all employees in departments 20 and 50 in alphabetical order by name.(hints: in, orderby)

```
SELECT last_name, department_id
FROM employees
WHERE department_id IN (20,50)
ORDER BY last_name;
```

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)

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

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

```
SELECT last_name, hire_date
FROM employees
WHERE hired_data LIKE '1994%';
```

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

```
SELECT last_name, job_id
FROM employees
WHERE managers_id IS NULL;
```

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 nul,orderby)

```
SELECT last_name, Salary, commission_pct
FROM employees
WHERE commission_pct IS NOT NULL
ORDER BY Salary DESC, commission_pct DESC;
```

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

```
SELECT last_name
FROM employees
WHERE last_name LIKE '__a%';
```

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

```
SELECT last_name
FROM employees
WHERE last_name LIKE '%a%e%' OR last_name LIKE '%e%a%'
```

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)

```
SELECT last_name, job_id, Salary
FROM employees
WHERE job_id IN('SA_REP', 'ST_CLERK') AND Salary
NOT IN(2500, 3500, 7000);
```

Evaluation Procedure	Marks awarded
Query(5)	5
Execution (5)	5
Viva(5)	4
Total (15)	14
Faculty Signature	