20CP208P 21BCP359

Date: 31st March 2023

EXPERIMENT 9

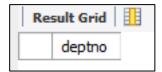
TITLE: Group by & Having clause

OBJECTIVE: To understand the use of group by and having clause.

Write SQL Queries for the following queries (use EMP and DEPT table of previous experiment).

1. List the Deptno where there are no emps.

SELECT deptno FROM Emp GROUP BY deptno HAVING COUNT(empno) = 0;



2. List the No.of emp's and Avg salary within each department for each job.

SELECT COUNT(empno) AS TotalEmp, AVG(sal) AS AvgSal, deptno, job FROM Emp GROUP BY deptno, job;

	TotalEmp	AvgSal	deptno	job
•	1	2850.0000	20	NULL
	2	950.0000	20	CLERK
	4	1400.0000	30	SALESMAN
	1	2975.0000	20	MANAGER
	1	2850.0000	30	MANAGER
	1	2450.0000	10	MANAGER
	2	3000.0000	20	ANALYST
	1	5000.0000	10	PRESIDENT
	1	950.0000	30	CLERK
	1	1300.0000	10	CLERK

3. Find the maximum average salary drawn for each job except for 'President'.

SELECT MAX(sal) AS MaxAvgSal FROM Emp WHERE sal IN (SELECT AVG(sal) AS AvgSal FROM Emp WHERE job != "President" GROUP BY job);

	MaxAvgSal
4	3000

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4. List the department details where at least two emps are working.

SELECT * FROM Dept WHERE deptno IN

(SELECT deptno FROM Emp

GROUP BY deptno HAVING COUNT(empno) >= 2);

	DEPTNO	DNAME	LOC
•	10	ACCOUNTING	NEW YORK
	20	RESEARCH	DALLAS
	30	SALES	CHICAGO
	NULL	NULL	NULL

5. List the no. of emps in each department where the no. is more than 3.

SELECT COUNT(empno) AS TotalEmp, deptno FROM Emp

GROUP BY deptno HAVING COUNT(empno) > 3;

	TotalEmp	deptno
>	6	20
	6	30

6. List the names of the emps who are getting the highest sal dept wise.

SELECT ename, deptno, sal FROM Emp

WHERE sal IN (SELECT MAX(sal) FROM

Emp GROUP BY deptno);

	ename	deptno	sal
•	XYZ	20	2850
	BLAKE	30	2850
	SCOTT	20	3000
	KING	10	5000
	FORD	20	3000

7. List the Deptno and their average salaries for dept with the average salary less than the averages for all departments.

SELECT deptno, AVG(sal) FROM Emp

GROUP BY deptno HAVING AVG(sal) <

(SELECT AVG(sal) FROM Emp);

	deptno	avg(sal)
)	30	1566.6667