**Advanced Database Management System**

**Lab Quiz**

**Pritom Debnath (20-42414-1)**

1. Find out the details including grade and dname of all clerk.

ANS: SELECT S.GRADE, D.DNAME FROM EMP E, SALGRADE S, DEPT D WHERE E.DEPTNO=D.DEPTNO AND E.SAL BETWEEN LOSAL AND HISAL AND E.JOB IN ('CLERK')

1. Find out the details with grade of the second maximum salary holder.
2. Find the grade 2 mgr who belong from dep 10 or 20.

ANS: SELECT S.GRADE, D.DNAME, E.\* FROM EMP E, SALGRADE S, DEPT D WHERE E.DEPTNO=D.DEPTNO AND E.SAL BETWEEN LOSAL AND HISAL AND E.DEPTNO IN(10,20) AND S.GRADE IN 2 AND E.EMPNO IN (SELECT MGR FROM EMP)

1. Find the highest paid Analyst of the Finance department who belong from the grade 2 and 3.

ANS: SELECT \* FROM EMP WHERE SAL IN(SELECT MAX(E.SAL) FROM EMP E, SALGRADE S, DEPT D WHERE E.DEPTNO=D.DEPTNO AND E.SAL BETWEEN LOSAL AND HISAL AND E.JOB='ANALYST' AND D.DNAME IN('FINANCE') AND S.GRADE IN(2,3))

1. Find out the dname with the most senior employee.

ANS: SELECT D.DNAME FROM EMP E, DEPT D WHERE E.DEPTNO=D.DEPTNO AND E.HIREDATE IN (SELECT MAX(HIREDATE) FROM EMP)

1. List out the Name, Job, Salary, grade of the emps in the department with the highest no of employees.

ANS: SELECT E.ENAME,E.JOB,E.SAL,S.GRADE FROM EMP E, SALGRADE S WHERE SAL BETWEEN LOSAL AND HISAL AND E.DEPTNO IN (SELECT DEPTNO FROM EMP GROUP BY DEPTNO HAVING COUNT(\*) IN (SELECT MAX(COUNT(\*)) FROM EMP GROUP BY DEPTNO))

1. Find out the grade with maximum number of salesman.

ANS: SELECT GRADE FROM EMP E,SALGRADE S WHERE E.SAL BETWEEN S.LOSAL AND S.HISAL AND E.JOB IN ('SALESMAN')

1. List all the Grade2 and Grade 3 salesman who belong from the Chicago and Dallas.

ANS: SELECT E.\* FROM EMP E, SALGRADE S, DEPT D WHERE E.DEPTNO=D.DEPTNO AND E.SAL BETWEEN LOSAL AND HISAL AND E.JOB='SALESMAN' AND D.LOC IN('CHICAGO','DALLAS') AND S.GRADE IN(2,3)

1. List THE Name of loc where highest no. of emps are working.

ANS: SELECT DNAME,LOC FROM DEPT WHERE DEPTNO IN (SELECT DEPTNO FROM EMP GROUP BY DEPTNO HAVING COUNT(\*) IN (SELECT MAX(COUNT(\*)) FROM EMP GROUP BY DEPTNO))

1. Find out the grade of all mgrs.

ANS: SELECT S.GRADE, E.\* FROM EMP E, SALGRADE S WHERE SAL BETWEEN LOSAL AND HISAL AND E.EMPNO IN (SELECT MGR FROM EMP)

1. Find out the name of the mgr who manage the maximum number of Analyst who belong from deptno 10 or 20.
2. Find out the mgr who lives in DALLAS and belong from grade 3 and 4.

ANS: SELECT E.\* FROM EMP E, SALGRADE S, DEPT D WHERE E.DEPTNO=D.DEPTNO AND E.SAL BETWEEN LOSAL AND HISAL AND D.LOC IN('DALLAS') AND S.GRADE IN(4,3) AND E.EMPNO IN (SELECT MGR FROM EMP)

1. Find out the details of the grade 2 mgrs Who manage the maximum no of employee.

**BONUS**

1. Find out the details of the SALESMAN whose location is same as Miller and grad is same like CLARK. (Without using subquery)

ANS: SELECT E1.\* FROM EMP E1, EMP E2, EMP E3,DEPT D1,DEPT D2,DEPT D3,SALGRADE S1,SALGRADE S3 WHERE D2.DEPTNO=E2.DEPTNO AND D1.DEPTNO=E1.DEPTNO AND D3.DEPTNO=E3.DEPTNO AND E1.SAL BETWEEN S1.LOSAL AND S1.HISAL AND E3.SAL BETWEEN S3.LOSAL AND S3.HISAL AND E1.JOB='SALESMAN' AND E2.ENAME='MILLER' AND E3.ENAME='CLARK' AND D1.LOC=D2.LOC AND S1.GRADE=S3.GRADE