DBS Labsheet-5 (CMS)

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We already Created Tables:

1. Dept: dnum int(pk), dname vc(20),dloc vc(10)
2. Emp: eno int (pk), ename vc(15), job(10), mgr int(fk), hiredate date, sal int, comm int, deptno int(FK)

We already Inserted following Data into Dept table:

INSERT INTO dept VALUES (10,'ACCOUNTING','NEW YORK');
INSERT INTO dept VALUES (20,'RESEARCH','DALLAS');
INSERT INTO dept VALUES (30,'SALES','CHICAGO');
INSERT INTO dept VALUES (40,'OPERATIONS','BOSTON');

Already Inserted following Data into Emp table:

INSERT INTO emp VALUES (7369,'SMITH','CLERK',7902,'17-DEC-80',800,NULL,20);
INSERT INTO emp VALUES (7499,'ALLEN','SALESMAN',7698,'20-FEB-81',1600,300,30);
INSERT INTO emp VALUES (7521,'WARD','SALESMAN',7698,'22-FEB-81',1250,500,30);
INSERT INTO emp VALUES (7566,'JONES','MANAGER',7839,'02-APR-81',2975,NULL,20);
INSERT INTO emp VALUES (7654,'MARTIN','SALESMAN',7698,'28-SEP-81',1250,1400,30);
INSERT INTO emp VALUES (7698,'BLAKE','MANAGER',7839,'01-MAY-81',2850,NULL,30);
INSERT INTO emp VALUES (7782,'CLARK','MANAGER',7839,'09-JUN-81',2450,NULL,10);
INSERT INTO emp VALUES (7788,'SCOTT','ANALYST',7566,'19-APR-87',3000,NULL,20);
INSERT INTO emp VALUES (7839,'KING','PRESIDENT',NULL,'17-NOV-81',5000,NULL,10);
INSERT INTO emp VALUES (7844,'TURNER','SALESMAN',7698,'08-SEP-81',1500,0,30);
INSERT INTO emp VALUES (7876,'ADAMS','CLERK',7788,'23-MAY-87',1100,NULL,20);
INSERT INTO emp VALUES (7900,'JAMES','CLERK',7698,'03-DEC-81',950,NULL,30);
INSERT INTO emp VALUES (7902,'FORD','ANALYST',7566,'03-DEC-81',3000,NULL,20);
INSERT INTO emp VALUES (7934,'MILLER','CLERK',7782,'23-JAN-82',1300,NULL,10);

Also inserted the following tuples to DEPT and EMP, in the last session.

1. Add the following two tuples to DEPT-
   (50, 'MARKETING','BOSTON')
   (60,'PRODUCTION', 'SAN FRANCISCO')
2. Add the following tuple to EMP-
   (7947,'MIKE','CLERK',7900,'18-MAY-85',1500,200,50)
   (7954,'BILL','MANAGER',7782,'20-FEB-81',1000,0,NULL)

Note: First complete the queries from the Labsheet-4, if anything left over and you could not cover in last class.

In this Lab session-5, students will learn to write SQL queries that use-

a. Grouping and Having clauses
b. Aggregate operations (sum, min, max, avg, and count)
c. EXISTS/NOT EXISTS
d. IN / NOT IN
e. Explicit Joins (inner and all outer joins)
f. Joining two instances of same table

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