

# Database Systems Labsheet-4

Prof R Gururaj

**In Labsheet-3 We have 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)

**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);
```

## **To be done in this session:**

**First make sure that above data is there in EMP & DEPT.** (let students check this first)

**Then do the following on the above table.**

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)

We write SQL statements to demonstrate the usage of-

- UNION
- INTERSECTION
- DIFFERENCE
- STRING matching
- EXISTS / NOT EXISTS
- JOINING TABLES etc.

**Prof R Gururaj  
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