# DBS Labsheet:4

**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)

**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);
```

// First, please ask students to complete pending exercises from Labsheet-3

## 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)

Write SQL statements for the following.

i) Get employee id, name and department name for those whose name starts with ‘J’ and has 5 letters.
ii) Get employee id, name and department name for those whose name has ‘IN’ as substring.
iii) Get employee id, name and department name for those whose name has exactly 4 letters.
iv) Display emp id, name ,deptno and salary sorted on deptno in ascending order and then on name in descending order.
v) Get eid, name and department name for those not allotted to any department.
vi) Get eid, name and department name for those not allotted to ant department.
Note: apply appropriate set operation. (UNION/MINUS/INTERSECT)
vii) Get eid, name and department name for those whose department is located in ‘BOSTON’
Note: first do it without nested query; then with a nested query- using EXISTS and IN operators separately.
viii) Get eid, name and salary for those whose salary is greater than the average salary.
ix) Get Dnum and dname for those not having any employee working with it.
x) For each employee get eid, ename, his managerid and manager’s name.
xi) Get eid and ename for those whose managers are working in ‘SALES’ department.
First without nested query, then with nested query.
xii) Get eid, ename for those managed by ‘BLAKE’.
xiii) Get eid, ename for those working with ‘SALES’ dept. using IN and EXISTS clauses.

**Prof R Gururaj**
**IC.**