

DBMS LAB – 4

1)

```
CREATE TABLE EMP( EMPNO INT(10),EFNAME  
VARCHAR(20),ELNAME VARCHAR(20),JOB VARCHAR  
(10),DEPTNAME VARCHAR (10),DEPTNO INT (2),ECITY VARCHAR  
(10),SAL INT (7),WORKEXPRIENCE INT(10),MANAGERNAME  
VARCHAR (10),MANAGERNO INT (20),PRIMARY KEY(DEPTNO) );
```

```
CREATE TABLE dept( DEPTNO INT(2), DNAME VARCHAR(10), LOC  
VARCHAR(10), LOCID INT(5) );
```

```
ALTER TABLE EMP ADD PRIMARY KEY(EMPNO);
```

```
ALTER TABLE EMP ADD FOREIGN KEY (DEPTNO) references  
EMP(EMPNO);
```

```
INSERT INTO EMP  
VALUES(1,'SOMA','VIGNESH','ENG','CSE',1,'CHENNAI',1000000,1,'M  
ANAGER1',1),  
(2,'SANJIV','KANNA','DOC','MEDICINE',2,'DELHI',2000000,2,'MANA  
GER2',2),  
(3,'SRI','VIGNESH','YT','SHORTS',3,'KOLKATA',3000000,3,'MANAGE  
R3',3),  
(4,'NITIN','KUMAR','TEACHER','ENGLISH',4,'HOSUR',4000000,4,'MA  
NAGER4',4),  
(5,'ABHI','MANO','CEO','ALL',5,'BANGALORE',5000000,5,'MANAGE  
R5',5);
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+  
+-----+-----+-----+-----+
```

EMPNO	EFNAME	ELNAME	JOB	DEPTNAME	DEPTNO	CITY	SAL	WORKEXP	MANAGERNAME	MANAGERNO
1	SOMA	VIGNESH	ENG	CSE	1	CHENNAI	1000000	1	MANAGER1	1
2	SANJIV	KANNA	DOC	MEDICINE	2	DELHI	2000000	2	MANAGER2	2
3	SRI	VIGNESH	YT	SHORTS	3	KOLKATA	3000000	3	MANAGER3	3
4	NITIN	KUMAR	TEACHER	ENGLISH	4	HOSUR	4000000	4	MANAGER4	4
5	ABHI	MANO	CEO	ALL	5	BANGALORE	5000000	5	MANAGER5	5

```
INSERT INTO dept VALUES(1,'CSE','CHENNAI',1),
(2,'MEDICINE','DELHI',2),(3,'SHORTS','KOLKATA',3),
(4,'ENGLISH','HOSUR',4),(5,'ALL','BANGALORE',5);
```

DEPTNO	DNAME	LOC	LOCID
1	CSE	CHENNAI	1
2	MEDICINE	DELHI	2
3	SHORTS	KOLKATA	3
4	ENGLISH	HOSUR	4
5	ALL	BANGALORE	5

2)

SELECT ELNAME,DEPTNO,DEPTNAME FROM EMP;

ELNAME	DEPTNO	DEPTNAME
VIGNESH	1	CSE
KANNA	2	MEDICINE
VIGNESH	3	SHORTS
KUMAR	4	ENGLISH
MANO	5	ALL

3)

SELECT EMP.JOB,dept.LOC FROM EMP,dept
WHERE EMP.DEPTNO=80;

Empty set

4)

SELECT EMP.ELNAME,EMP.DEPTNAME,dept.LOCID,EMP.ECITY
FROM EMP inner JOIN dept ON EMP.DEPTNO=dept.DEPTNO
WHERE EMP.SAL>=10000;

ELNAME	DEPTNAME	LOCID	ECITY
VIGNESH	CSE	1	CHENNAI
KANNA	MEDICINE	2	DELHI
VIGNESH	SHORTS	3	KOLKATA
KUMAR	ENGLISH	4	HOSUR
MANO	ALL	5	BANGALORE

5)SELECT ELNAME,DEPTNAME FROM EMP WHERE EFNAME
LIKE '%a%';

ELNAME	DEPTNAME
VIGNESH	CSE
KANNA	MEDICINE
MANO	ALL

6)
SELECT ELNAME,EMPNO,MANAGERNAME,MANAGERNO FROM
EMP;

ELNAME	EMPNO	MANAGERNAME	MANAGERNO
VIGNESH	1	MANAGER1	1
KANNA	2	MANAGER2	2
VIGNESH	3	MANAGER3	3
KUMAR	4	MANAGER4	4
MANO	5	MANAGER5	5

7)
SELECT ELNAME,JOB,DEPTNO,DEPTNAME FROM EMP
-> WHERE ECITY ='toronto';

Empty set

8)
SELECT * FROM EMP
-> WHERE MANAGERNAME = NULL
-> ORDER BY EMPNO DESC;

Empty set

9)SELECT s.ELNAME,s.DEPTNO FROM EMP s JOIN EMP p WHERE
s.DEPTNAME=p.DEPTNAME;

ELNAME	DEPTNO
VIGNESH	1
KANNA	2
VIGNESH	3
KUMAR	4
MANO	5

10)
SELECT SUM(SAL),AVG(SAL) FROM EMP;

SUM(SAL)	AVG(SAL)
15000000	3000000.0000

11)
SELECT * FROM EMP WHERE WORKEXPERIENCE=(SELECT
MAX(WORKEXPERIENCE) FROM
EMP);

EMPNO	EFNAME	ELNAME	JOB	DEPTNAME	DEPTNO	ECITY	SAL	WORKEXPERIENCE	MANAGERNAME	MANAGERNO
5	ABHI	MANO	CEO	ALL	5	BANGALORE	5000000	5	MANAGER5	5

12)SELECT COUNT(EMPNO) FROM EMP;

```
+-----+
| COUNT(EMPNO) |
+-----+
|      5 |
+-----+
```

13)SELECT * FROM EMP WHERE WORKEXPRIENCE=(SELECT MIN(WORKEXPRIENCE) FROM EMP);

```
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
| EMPNO | EFNAME | ELNAME | JOB | DEPTNAME | DEPTNO |
| ECITY | SAL | WORKEXPRIENCE | MANAGERNAME |
| MANAGERNO |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
| 1 | SOMA | VIGNESH | ENG | CSE | 1 | CHENNAI | 1000000
| 1 | MANAGER1 | 1 |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
```

14)SELECT * FROM EMP WHERE SAL=(SELECT MAX(SAL) FROM EMP);

```
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
| EMPNO | EFNAME | ELNAME | JOB | DEPTNAME | DEPTNO |
| ECITY | SAL | WORKEXPRIENCE | MANAGERNAME |
| MANAGERNO |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
| 5 | ABHI | MANO | CEO | ALL | 5 | BANGALORE | 5000000
| 5 | MANAGER5 | 5 |
```

```
+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
```

2.

1)CREATE TABLE Depositor(CUSNAME VARCHAR(20), ACC_NO
VARCHAR(20));

CREATE TABLE Borrower(CUSNAME VARCHAR(20), LOAN_NO
VARCHAR(20));

ALTER TABLE Depositor
-> ADD PRIMARY KEY(ACC_NO);

ALTER TABLE Borrower ADD PRIMARY KEY(LOAN_NO);

INSERT INTO Depositor VALUES('Soma',1),('Sanjiv',2),('Sri',3),
('Nitin',4),('Mano',5);

INSERT INTO Borrower VALUES('Soma',1),('Sanjiv',2),('Sri',3),
('Nitin',4),('Mano',5);

2)SELECT CUSNAME FROM Depositor INTERSECT SELECT
CUSNAME FROM Borrower;

```
+-----+
| CUSNAME |
+-----+
| Soma    |
| Sanjiv  |
| Sri     |
| Nitin   |
| Mano    |
+-----+
```

3)SELECT CUSNAME FROM Depositor EXCEPT SELECT CUSNAME
FROM Borrower;
Empty set

4)SELECT CUSNAME FROM Depositor UNION SELECT CUSNAME
FROM Borrower;

```
+-----+  
| CUSNAME |  
+-----+  
| Soma    |  
| Sanjiv  |  
| Sri     |  
| Nitin   |  
| Mano    |  
+-----+
```