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SUBJECT: DATABASE MANAGEMENT SYSTEM
(PROBLEMSHEET-1)

ENROLLMENT NUMBER:20020201343

ROLL NO: 331

DIV-E

COLLEGE: Bhagwan Mahavir University

PROBLEM SHEET-1

PROBLEM-1:

Create Table:

CREATE TABLE TBL_EMP

(

EMPNO NUMERIC (5) PRIMARY KEY,

ENAME VARCHAR (50),

JOB VARCHAR (20),

HIREDATE DATE,

SALARY NUMERIC (10),

DEPTNO NUMERIC (5),

CONSTRAINT FK1 FOREIGN KEY (DEPTNO) REFERENCES DEPT (DEPTNO)

)

EMPNO	ENAME	JOB	HIREDATE	SALARY	DEPTNO

1. Display all the records from emp table.

ANS: SELECT *FROM TBL_EMP.

3. Display all the employee whose salary is higher than 2000.

ANS: SELECT * FROM TBL_EMP WHERE SALARY > 2000

EMPNO	ENAME	JOB	HIREDATE	SALARY	DEPTNO
1782	CLARK	MANAGER	06/09/81	2450	10
1782	JONES	MANAGER	04/02/81	2975	20
7698	BLAKE	MANAGER	05/01/81	2850	30
7788	SCOTT	ANALYST	04/19/87	3000	20
7839	KING	PRESIDENT	11/17/81	5000	10

4. Display all employee with job whose hire date Before 28-sep-810.

ANS: SELECT * FROM TBL_EMP WHERE HIREDATE < '1981-09-28'

EMPNO	ENAME	JOB	HIREDATE	SALARY	DEPTNO
1782	CLARK	MANAGER	06/09/81	2450	10
7369	SMITH	CLERK	12/17/80	800	20
7499	ALLEN	SALESMAN	02/20/81	1600	30
7521	WARD	SALESMAN	02/22/81	1250	30
7566	JONES	MANAGER	04/02/81	2975	20
7698	BLAKE	MANAGER	05/01/81	2850	30

Record 1 of 6

SELECT * FROM TBL_EMP WHERE HIREDATE < '1981-09-28'

5. Display all employee number ,employee name ,job ,department name.

ANS: SELECT EMPNO, ENAME, JOB, DNAME FROM TBL_EMP, DEPT WHERE
TBL_EMP.DEPTNO = DEPT.DEPTNO

EMPNO	ENAME	JOB	DNAME
1782	CLARK	MANAGER	ACCOUNTING
7369	SMITH	CLERK	RESEARCH
7499	ALLEN	SALESMAN	SALES
7521	WARD	SALESMAN	SALES
7566	JONES	MANAGER	RESEARCH
7654	MARTIN	SALESMAN	SALES
7698	BLAKE	MANAGER	SALES
7788	SCOTT	ANALYST	RESEARCH
7839	KING	PRESIDENT	ACCOUNTING

Record 1 of 9

SELECT EMPNO, ENAME, JOB, DNAME FROM TBL_EMP, DEPT WHERE TBL_EMP.DEPTNO = DEPT.DEPTNO

6. Display all employee whose location is 'DALLAS'.

ANS: SELECT EMPNO, ENAME, JOB, LOC FROM TBL_EMP, DEPT WHERE
TBL_EMP.DEPTNO = DEPT.DEPTNO AND LOC='DALLAS'

EMPNO	ENAME	JOB	LOC
7369	SMITH	CLERK	DALLAS
7566	JONES	MANAGER	DALLAS
7788	SCOTT	ANALYST	DALLAS

Record 1 of 3

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SELECT EMPNO, ENAME, JOB, LOC FROM TBL_EMP, DEPT WHERE TBL_EMP.DEPTNO = DEPT.DEPTNO AND LOC='DALLAS'
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7. Display all employee whose department name is 'SALES'.

ANS: SELECT EMPNO, ENAME, JOB, DNAME FROM TBL_EMP, DEPT WHERE
TBL_EMP.DEPTNO = DEPT.DEPTNO AND DNAME='SALES'

EMPNO	ENAME	JOB	DNAME
7499	ALLEN	SALESMAN	SALES
7521	WARD	SALESMAN	SALES
7654	MARTIN	SALESMAN	SALES
7698	BLAKE	MANAGER	SALES

Record 1 of 4

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SELECT EMPNO, ENAME, JOB, DNAME FROM TBL_EMP, DEPT WHERE TBL_EMP.DEPTNO = DEPT.DEPTNO AND DNAME='SALES'
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8. Display all employee whose salary is higher than 2000 and location is 'DALAS'.

ANS: SELECT * FROM TBL_EMP,DEPT WHERE SALARY>2000 AND LOC='DALLAS'

EMPNO	ENAME	JOB	HIREDATE	SALARY	DEPTNO	DEPTNO	DNAME	LOC
1782	CLARK	MANAGER	06/09/81	2450	10	20	RESEARCH	DALLAS
7566	JONES	MANAGER	04/02/81	2975	20	20	RESEARCH	DALLAS
7698	BLAKE	MANAGER	05/01/81	2850	30	20	RESEARCH	DALLAS
7788	SCOTT	ANALYST	04/19/87	3000	20	20	RESEARCH	DALLAS
7839	KING	PRESIDENT	11/17/81	5000	10	20	RESEARCH	DALLAS

Record 1 of 5

SELECT * FROM TBL_EMP.DEPT WHERE SALARY>2000 AND LOC='DALLAS'

9. Display all employee whose job is 'SALESMAN' and location not in 'CHICAGO'.

ANS: SELECT * FROM TBL_EMP,DEPT WHERE JOB='SALESMAN' AND LOC='CHICAGO'

	EMPNO	ENAME	JOB	HIREDATE	SALARY	DEPTNO	DEPTNO	DNAME	LOC
▶	7499	ALLEN	SALESMAN	02/20/81	1600	30	30	SALES	CHICAGO
	7521	WARD	SALESMAN	02/22/81	1250	30	30	SALES	CHICAGO
	7654	MARTIN	SALESMAN	09/28/81	1250	30	30	SALES	CHICAGO

EMPNO	ENAME	JOB	HIREDATE	SALARY	DEPTNO
1782	CLARK	MANAG	06/09/81	2450	10
7369	SMITH	CLERK	12/17/80	800	20
7499	ALLEN	SALESM	02/20/81	1600	30
7521	WARD	MANAG	02/22/81	1250	30
7566	JONES	MANAG	04/02/81	2975	20
7654	MARTIN	SALESM	09/28/81	1250	30
7698	BLAKE	MANAG	05/01/81	2850	30
7788	SCOTT	ANALY	04/19/87	3000	20

13. Undo the above command.

ANS: rollback

14. Display all the records in descending order of salary.

ANS: SELECT * FROM TBL_EMP ORDER BY SALARY DESC

EMPNO	ENAME	JOB	HIREDATE	SALARY	DEPTNO
7788	SCOTT	ANALYST	04/19/87	3000	20
7566	JONES	MANAGER	04/02/81	2975	20
7698	BLAKE	MANAGER	05/01/81	2850	30
1782	CLARK	MANAGER	06/09/81	2450	10
7499	ALLEN	SALESMAN	02/20/81	1600	30
7654	MARTIN	SALESMAN	09/28/81	1250	30
7521	WARD	MANAGER	02/22/81	1250	30
7369	SMITH	CLERK	12/17/80	800	20

Record 1 of 8

SELECT * FROM TBL_EMP ORDER BY SALARY DESC

15. Find the employee who have the maximum salary.

ANS: SELECT * FROM TBL_EMP WHERE SALARY = (SELECT MAX(SALARY) FROM TBL_EMP)

EMPNO	ENAME	JOB	HIREDATE	SALARY	DEPTNO
7788	SCOTT	ANALYST	04/19/87	3000	20

Record 1 of 1

SELECT * FROM TBL_EMP WHERE SALARY = (SELECT MAX(SALARY) FROM TBL_EMP)

16. Find the employee who have second highest salary.

ANS: SELECT * FROM TBL_EMP WHERE SALARY = (SELECT MAX(SALARY) FROM TBL_EMP WHERE SALARY < (SELECT MAX(SALARY) FROM TBL_EMP))

EMPNO	ENAME	JOB	HIREDATE	SALARY	DEPTNO
7566	JONES	MANAGER	04/02/81	2975	20

Record 1 of 1

SELECT * FROM TBL_EMP WHERE SALARY = (SELECT MAX(SALARY) FROM TBL_EMP WHERE SALARY < (SELECT MAX(SALARY) FROM TBL_EMP))

17. Find the employee who have third highest salary.

ANS: SELECT * FROM TBL_EMP WHERE SALARY = (SELECT MAX(SALARY) FROM TBL_EMP WHERE SALARY< (SELECT MAX(SALARY) FROM TBL_EMP WHERE SALARY< (SELECT MAX(SALARY) FROM TBL_EMP)))

	EMPNO	ENAME	JOB	HIREDATE	SALARY	DEPTNO
▶	7698	BLAKE	MANAGER	05/01/81	2850	30
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Record 1 of 1

SELECT * FROM TBL_EMP WHERE SALARY = (SELECT MAX(SALARY) FROM TBL_EMP WHERE SALARY < (SELECT MAX(SALARY) FROM TBL_EMP WHERE SALARY < (SELECT MAX(SALARY) FROM TBL_EMP)))

18. Display all the employee whose length of location is higher than 4.

ANS: SELECT * FROM TBL_EMP, DEPT WHERE LENGTH(LOC)>4 AND TBL_EMP.DEPTNO = DEPT.DEPTNO

	EMPNO	ENAME	JOB	HIREDATE	SALARY	DEPTNO	DEPTNO	DNAME	LOC
▶	1782	CLARK	MANAGER	06/09/81	2450	10	10	ACCOUNTING	NEW YORK
	7369	SMITH	CLERK	12/17/80	800	20	20	RESEARCH	DALLAS
	7499	ALLEN	SALESMAN	02/20/81	1600	30	30	SALES	CHICAGO
	7521	WARD	MANAGER	02/22/81	1250	30	30	SALES	CHICAGO
	7566	JONES	MANAGER	04/02/81	2975	20	20	RESEARCH	DALLAS
	7654	MARTIN	SALESMAN	09/28/81	1250	30	30	SALES	CHICAGO
	7698	BLAKE	MANAGER	05/01/81	2850	30	30	SALES	CHICAGO
	7788	SCOTT	ANALYST	04/19/87	3000	20	20	RESEARCH	DALLAS
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	EMPNO	ENAME	JOB	HIREDATE	SALARY	DEPTNO
▶	1782	CLARK	MANAGER	06/09/81	2450	10
	7369	SMITH	CLERK	12/17/80	800	20
	7566	JONES	MANAGER	04/02/81	2975	20
	7788	SCOTT	ANALYST	04/19/87	3000	20
	7499	ALLEN	SALESMAN	02/20/81	1600	30
	7521	WARD	MANAGER	02/22/81	1250	30
	7654	MARTIN	SALESMAN	09/28/81	1250	30
	7698	BLAKE	MANAGER	05/01/81	2850	30
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Record 1 of 8

SELECT * FROM TBL_EMP WHERE DEPTNO BETWEEN 10 AND 40

21. Change the employee whose location is not 'DALAS' and salary is higher than 3000.

ANS: UPDATE TBL_EMP SET ENAME='MITEN' WHERE SALARY>3000 AND DEPTNO NOT IN (SELECT DEPTNO FROM DEPT WHERE LOC='DALLAS')

EMPNO	ENAME	JOB	HIREDATE	SALARY	DEPTNO
1782	CLARK	MANAGER	06/09/81	2450	10
7369	SMITH	CLERK	12/17/80	800	20
7499	ALLEN	SALESMAN	02/20/81	1600	30
7521	WARD	MANAGER	02/22/81	1250	30
7566	JONES	MANAGER	04/02/81	2975	20
7654	MARTIN	SALESMAN	09/28/81	1250	30
7698	BLAKE	MANAGER	05/01/81	2850	30
7788	SCOTT	ANALYST	04/19/87	3000	20

23. Rename table DEPT to DEPT1.

ANS: ALTER TABLE DEPT RENAME TO DEPT1

Tables		
DEPT1	TBL_EMP	

DEPTNO	DNAME	LOC
10	ACCOUNTING	NEW YORK
20	RESEARCH	DALLAS
30	SALES	CHICAGO
40	OPERATIONS	BOSTON

24. Display all the employee whose department number is between 10 and 40 and location start with 'N'.

ANS: SELECT * FROM DEPT WHERE DEPTNO BETWEEN 10 AND 40 AND
DEPTNO=(SELECT DEPTNO FROM DEPT WHERE LOC LIKE 'N%')

	DEPTNO	DNAME	LOC
▶	10	ACCOUNTING	NEW YORK
⚙			

Record	1	of	1	◀	▶	⚙
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SELECT * FROM DEPT WHERE DEPTNO BETWEEN 10 AND 40 AND DEPTNO=(SELECT DEPTNO FROM DEPT WHERE LOC LIKE 'N%')

```
SELECT * FROM DEPT WHERE DEPTNO BETWEEN 10 AND 40 AND DEPTNO=(SELECT DEPTNO FROM DEPT WHERE LOC LIKE 'N%')
```