

VASAVI COLLEGE OF ENGINEERING

(AUTONOMOUS)
(Affiliated to Osmania University)

Hyderabad - 500 031.

DEPARTMENT OF

: CSE

NAME OF THE LABORATORY : DBMS

Name K.S.I. SIVANI

Roll No. 052

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LAB PROGRAMS-5

* Joining tables EMP, DEPT and SALGRADE and performing operations using SQL queries:

DEPT TABLE:

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

SAL GRADE TABLE:

GRADE	LOSAL	HISAL
1	700	1200
2	1201	1400
3	1401	2000
4	2001	3000
5	3001	9999

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- 8 1) List employee names and dept names with which they are associated.

→ Select ename, dname from emp natural join dept;

ENAME	DNAME
Smith	Research
Allen	Sales
Ward	Sales
Jones	Research
Martin	Sales
Blake	Sales
Clark	Accounting
Scott	Research
King	Accounting
Turner	Sales
Adams	Research
James	Sales
Ford	Research
Miller	Accounting.

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- 2) List employee names, salary and their grade.
→ Select ename, sal, grade. from emp, salgrade
Where sal between losal and hisal;

ENAME	SAL	GRADE
Smith	800	1
James	950	1
Adams	1100	1
Ward	1250	2
Martin	1250	2
Miller	1300	2
Turner	1500	3
Allen	1600	3
Clark	2450	4
Blake	2850	4
Jones	2975	4
Scott	3000	4
Ford	3000	4
King	5000	5

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3) List employee name, dept name along with grade:

ENAME	DNAME	GRADE
King	Accounting	5
Ford	Research	4
Scott	Research	4
Jones	Research	4
Blake	Sales	4
Clark	Accounting	4
Allen	Sales	3
Turner	Sales	3
Miller	Accounting	2
Ward	Sales	2
Martin	Sales	2
Adams	Research	1
James	Sales	1
Smith	Research	1

4) List employee names and their manager names

→ Select e1.name, e2.name manager from emp e1,
emp e2 where e1.mgr = e2.empno;

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<u>ENAME</u>	<u>MANAGER</u>
Ford	Jones
Scott	Jones
James	Blake
Turner	Blake
Martin	Blake
Ward	Blake
Allen	Blake
Miller	Clark
Adams	Scott
Clark	King
Blake	King
Jones	King
Smith	Ford

5) List dept name and manager name.

<u>ENAME</u>	<u>JOB</u>	<u>DNAME</u>
Clark	Manager	Accounting
Jones	Manager	Research
Blake	Manager	Sales.

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- 6) List managers of various depts. along with grade sorted on grade :
- Select ename, deptno, grade from emp, salgrade where job = 'MANAGER' and sal between losal and hisal order by grade;

ENAME	DEPTNO	GRADE
Jones	20	4
Clark	10	4
Blake	30	4

- 7) List employees having Commission along with grade.

ENAME	COMM	GRADE
Allen	300	3

Select ename, comm, grade from emp, salgrade where sal between losal and hisal and comm is not null;

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ENAME	COMM	GRADE
Allen	300	3
Turner	0	3
Martin	1400	2
Ward	500	2

- 8) List employee names with job manager along with their manager names to whom they have to report:

→ select e1.name, e1.job, e2.name manager from emp e1, emp e2 where e1.mgr = e2.empno and e1.job = 'MANAGER';

ENAME	JOB	MANAGER
Clark	Manager	King
Blake	Manager	King
Jones	Manager	King.

- 9) List names of employees who are working in the same dept of their manager.

select e1.name, e1.deptno, e2.ename, e2.deptno from emp e1, emp e2 where e1.mgr = e2.empno and e1.deptno = e2.deptno;

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<u>ENAME</u>	<u>DEPTNO</u>	<u>ENAME</u>	<u>DEPTNO</u>
Ford	20	Jones	20
Scott	20	Jones	20
James	30	Blake	30
Turner	30	Blake	30
Martin	30	Blake	30
Ward	30	Blake	30
Allen	30	Blake	30
Miller	10	Clark	10
Adams	20	Scott	20
Clark	10	King	10
Smith	20	Ford	20

- 10) List names of employees who are not working in the same dept of their manager.

Select e1.ename, e1.deptno, e2.ename, e2.deptno from emp e1, emp e2 where e1.mgr=e2.empno and e1.deptno != e2.deptno;

<u>ENAME</u>	<u>DEPTNO</u>	<u>ENAME</u>	<u>DEPTNO</u>
Blake	30	King	10
Jones	20	King	10

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- 11) List names of employees having first character in their name and first character in their deptname same.

→ select ename, dname from emp natural join dept where substr(ename, 1, 1) = substr(dname, 1, 1);
No rows selected.

- 12) List employees who joined in the present month in any year and having grade and last digit in the year are same.

→ select ename, hiredate, grade from emp, salgrade where sal between losal and hisal and to_char(hiredate, 'MON') = 'DEC' and grade = substr(to_char(hiredate, 'YY'), 2, 2);

ENAME	HIREDATE	GRADE
JAMES	03-DEC-81	1

- 13) List names of employees whose empno, mgr and grade gives the same remainder when

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divided by 2

→ Select empno, mgr, grade from emp, salgrade
Where sal between losal and hisal and
 $(\text{mod}(\text{empno}, 2) = \text{mod}(\text{mgr}, 2))$ and $(\text{mod}(\text{mgr}, 2) = \text{mod}(\text{grade}, 2))$;

EMPNO	MGR	GRADE
7734	7782	2
7654	7698	2
7902	7566	4
7788	7566	4

14) List the names of employees having grade and
ten's position in the deptno same.

Select ename, deptno, grade from emp, salgrade
Where sal between losal and hisal and
 $\text{grade} = (\text{deptno}/10)$;

ENAME	DEPTNO	GRADE
ALLEN	30	3
TURNER	30	3

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(15) same as (14)

- 16) List the employee names, dept name and dept location of those employees having any of these 3 same length.

→ select ename, dname, loc from emp, dept
where length(ename) = length(dname) and
length(dname) = length(loc);
no rows selected.

- 17) List names of employees having month number of hiredate and grade same.

→ select ename, hiredate, grade from emp,
Salgrade where grade = to_char(hiredate, 'MM');

<u>ENAME</u>	<u>HIREDATE</u>	<u>GRADE</u>
Allen	20-FEB-81	2
Ward	22-FEB-81	2
Jones	02-APR-81	4
Blake	01-MAY-81	5

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Adams 12-JAN-83 1

Miller 23-JAN-82 1

- 18) List names of clerks who are reporting to analyst.

→ select e1.ename, e1.job, e2.ename, e2.job
from emp e1, emp e2 where e1.mgr = e2.empno
and e1.job = 'CLERK' and e2.job = 'ANALYST';

ENAME	JOB	ENAME	JOB
SMITH	CLERK	FORD	ANALYST
ADAMS	CLERK	SCOTT	ANALYST

- 19) List emp names and their manager names having same grade.

→ select e1.ename, s1.grade, e2.ename, s2.grade
from emp e1, salgrade s1, emp e2, salgrade s2
where e1.sal between s1.losal and s1.hisal
and e2.sal between s2.losal and s2.hisal

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and $e1.mgr = e2.empno$ and $s1.grade = s2.grade$

ENAME	GRADE	ENAME	GRADE
SCOTT	4	Jones	4
FORD	4	Jones	4

20) List emp names of employees who joined before their manager's joining date.

→ Select $e1.ename, e1.hiredate, e2.ename$ manager, $e2.hiredate$ from emp $e1, emp e2$ where $e1.mgr = e2.empno$ and $e1.hiredate < e2.hiredate$;

ENAME	HIREDATE	MANAGER	HIREDATE
Ward	22-FEB-81	Blake	01-MAY-81
Allen	20-FEB-81	Blake	01-MAY-81
Clark	09-JUN-81	King	17-NOV-81
Blake	01-MAY-81	King	17-NOV-81
Jones	02-APR-81	King	17-NOV-81
Smith	17-DEC-80	Ford	03-DEC-81