

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 Page No. 15

LAB PROGRAMS-3:

Execution of basic SQL statements on the

EMPLOYEE TABLE:

→ select * from EMP;

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	Smith	Clerk	7902	17-DEC-80	800		20
7499	Allen	Salesman	7698	20-FEB-81	1600	300	30
7521	Ward	Salesman	7698	22-FEB-81	1250	500	30
7566	Jones	Manager	7839	02-APR-81	2975		20
7654	Martin	Salesman	7698	28-SEP-81	1250	1400	30
7698	Blake	Manager	7839	01-MAY-81	2850		30
7782	Clark	Manager	7839	09-JUN-81	2450		10
7788	Scott	Analyst	7566	09-DEC-82	3000		20
7839	King	President		17-NOV-81	5000		10
7844	Turner	Salesman	7698	08-SEP-81	1500	0	30
7876	Adams	Clerk	7788	12-JAN-83	1100		20
7900	James	Clerk	7698	03-DEC-81	950		30
7902	Ford	Analyst	7566	03-DEC-81	3000		20
7934	Miller	Clerk	7782	23-JAN-82	1300		10

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Answer the following acc. to the EMP TABLE :

1) List empno, ename and salary :

→ select empno, ename, sal from emp;

EMPNO	ENAME	SAL
7369	Smith	800
7499	Allen	1600
7521	Ward	1250
7566	Jones	2975
7654	Martin	1250
7698	Blake	2850
7782	Clark	2450
7788	Scott	3000
7839	King	5000
7844	Turner	1500
7876	Adams	1100
7900	James	950
7902	Ford	3000
7934	Miller	1300

2) List the names of all Managers.

→ select ename, job from emp where job='MANAGER';

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ENAME	JOB
-------	-----

Jones	MANAGER
Blake	MANAGER
Clark	MANAGER

3) List all clerks in deptno = 30.

→ Select ename, deptno from emp where deptno = 30
and job = 'CLERK';

ENAME	DEPTNO
JAMES	30

4) List the employees to who manager is 7698

→ select ename, mgr from emp where mgr = 7698;

ENAME	MGR
ALLEN	7698
WARD	7698
MARTIN	7698
TURNER	7698
JAMES	7698

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5) List jobs in dept no 20.

→ select distinct(job), deptno from emp where
deptno = 20;

JOB	DEPTNO
MANAGER	20
ANALYST	20
CLERK	20

6) List employee names whose salary is between
2000 and 3000.

→ select ename, sal from emp where sal between
2000 and 3000;

ENAME	SAL
JONES	2975
BLAKE	2850
CLARK	2450
SCOTT	3000
FORD	3000

7) List employees in the departments 10, 20.

→ select ename, deptno from emp where deptno = 10
or deptno = 20;

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ENAME	DEPTNO
Smith	20
Jones	20
Clark	10
Scott	20
King	10
Adams	20
Ford	20
Miller	10

8) List employee names which begin with S.

→ select ename from emp where ename like 'S%';

ENAME

Smith

Scott

9) List employee names having 'A' in their names.

→ select ename from emp where ename like '%A%';

ENAME

ALLEN

WARD

MARTIN

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BLAKE

CLARK

ADAMS

JAMES.

10) List employees who have joined in JAN.

→ select ename, hiredate from emp where
to_char(hiredate, 'MON') = 'JAN';

ENAME	HIREDATE
-------	----------

ADAMS	12-JAN-83
-------	-----------

MILLER	23-JAN-82
--------	-----------

11) List employees who have joined in the year 81

→ select ename, hiredate from emp where
to_char(hiredate, 'YY') = '81';

ENAME	HIREDATE
-------	----------

ALLEN	20-FEB-81
-------	-----------

WARD	22-FEB-81
------	-----------

JONES	02-APR-81
-------	-----------

MARTIN	28-SEP-81
--------	-----------

BLAKE	01-MAY-81
-------	-----------

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CLARK	09-JUN-81
KING	17-NOV-81
TURNER	08-SEP-81
JAMES	03-DEC-81
FORD	03-DEC-81

12) List all distinct jobs.

→ select distinct (job) from emp;

JOB

CLERK

SALESMAN

PRESIDENT

MANAGER

ANALYST

13) List employee names in alphabetical order:

→ select ename, job from emp order by ename;

ENAME

JOB

ADAMS

CLERK

ALLEN

SALESMAN

BLAKE

MANAGER

CLARK

MANAGER

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FORD	ANALYST
JAMES	CLERK
JONES	CLERK
KING	PRESIDENT
MARTIN	SALESMAN
MILLER	CLERK
SCOTT	ANALYST
SMITH	CLERK
TURNER	SALESMAN
WARD	SALESMAN

14) List employee names alphabetically department wise.

→ select deptno, ename, job from emp order by deptno, ename;

ENAME	ENAME	JOB
DEPTNO		
10	CLARK	MANAGER
10	KING	PRESIDENT
10	MILLER	CLERK
20	ADAMS	CLERK
20	FORD	ANALYST
20	JONES	MANAGER

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20	SCOTT	ANALYST
20	SMITH	CLERK
30	ALLEN	SALESMAN
30	BLAKE	MANAGER
30	JAMES	CLERK
30	MARTIN	SALESMAN
30	TURNER	SALESMAN
30	WARD	SALESMAN

15) List employee names alphabetically job wise.

→ select deptno, ename, job from emp order by job, ename;

DEPTNO	ENAME	JOB
20	FORD	ANALYST
20	SCOTT	ANALYST
20	ADAMS	CLERK
20	JAMES	CLERK
10	MILLER	CLERK
20	SMITH	CLERK
30	BLAKE	MANAGER
10	CLARK	MANAGER
20	JONES	MANAGER

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10	KING	PRESIDENT
30	ALLEN	SALESMAN
30	MARTIN	SALESMAN
30	TURNER	SALESMAN
30	WARD	SALESMAN

16) List employee numbers, name, sal, DA (15% of SAL) and PF (10% of SAL)

→ select empno, ename sal, 0.15*sal DA, 0.1*sal PF
from emp;

EMPNO	ENAME	SAL	DA	PF
7369	Smith	800	120	80
7499	Allen	1600	240	160
7521	Ward	1250	187.5	125
7566	Jones	2975	446.25	297.5
7654	Martin	1250	187.5	125
7698	Blake	2850	427.5	285
7782	Clark	2450	367.5	245
7788	Scott	3000	450	300
7839	King	5000	750	500
7844	Turney	1500	225	150

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7876	Adams	1100	165	110
7900	James	950	142.5	95
7902	Ford	3000	450	300
7934	Miller	1300	195	130

17) List employee names having an experience more than 15 years

→ select ename, hiredate, round((months_between(sysdate, hiredate))/12) exp from emp where round((months_between(sysdate, hiredate))/12) > 40;

ENAME	HIREDATE	EXP
Smith	17-DEC-80	42
Allen	20-FEB-81	42
Ward	22-FEB-81	42
JONES	02-APR-81	42
Martin	28-SEP-81	42
Blake	01-MAY-81	42
Clark	09-JUN-81	42
King	17-NOV-81	41
Turner	08-SEP-81	42

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James 03-DEC-81 41

Ford 03-DEC-81 41

Miller 23-JAN-82 41

18) List employee names whose commission is NULL.

→ Select ename from emp where comm is NULL;

ENAME

Smith

Jones

Blake

Clark

Scott

King

Adams

James

Ford

Miller

19) List employees who do not report to anybody.

→ Select ename from emp where mgr is NULL;

ENAME

KING

20) List maximum sal, minimum sal, average sal.

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→ select max(sal), min(sal), avg(sal) from emp;

MAX(SAL)	MIN(SAL)	AVG(SAL)
5000	800	2073.21429

2) List the number of job.

→ select count(distinct(job)) from emp;
count(distinct(JOB))
5

2) List the no. of people and avg salary in deptno 30.

→ select count(ename), avg(sal) from emp
where deptno = 30;

count(ename)	avg(sal)
6	1566.66667

2) List maximum sal and minimum sal in the designations SALESMAN and CLERK.

→ select job, max(sal), min(sal) from emp
where job = 'SALESMAN' or job = 'CLERK'
group by job;

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JOB	MAX(SAL)	MIN(SAL)
CLERK	1300	800
SALESMAN	1600	1250

- 24) List the no. of people and average salary of employees joined in 81, 82 and 83.

→ select count(ename), avg(sal) from emp
where to_char(hiredate, 'YY') in (81, 82, 83);

COUNT(ENAME)	AVG(SAL)
13	2171.5385.

- 25) List the jobs that are unique to deptno 20
Set operations.

→ (select & distinct(job) from emp where deptno=20)
minus(select job from emp where deptno in (10, 30));

JOB

ANALYST

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26) Display today's date and present time.

→ select to_char(sysdate, 'DD-MM-YYYY HH:MM:SS')
from dual;

TO_CHAR(SYSDATE, 'DD

31-03-2023 11:03:51

27) (A, B) @ SMITH 17th DEC NINETEEN EIGHTY

(B) SMITH SEVENTEENTH DEC NINETEEN EIGHTY.

→ select ename, to_char(hiredate, 'DDTH MON YEAR')
to_char(hiredate, 'DDSP MON YEAR') from emp;

(E, D) (C) SMITH Week day of joining

(D) SMITH 17/12/80

→ select ename, hiredate, ~~year~~

→ select ename, to_char(hiredate, 'DD/MM/YY'),
to_char(hiredate, 'DAY') from emp;

28) List employee names and their experience in years.

→ select ename, hiredate from emp where

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→ select ename, hiredate, round((months_between(sysdate, hiredate))/12) exp from emp;

ENAME	HIREDATE	EXP
Smith	17-DEC-80	42
Allen	20-FEB-81	42
WARD	22-FEB-81	42
Jones	02-APR-81	42
Martin	28-SEP-81	42
Blake	01-MAY-81	42
Clark	09-JUN-81	42
Scott	09-DEC-81	40
King	17-NOV-81	41
Turney	08-SEP-81	42
Adams	12-JAN-83	40
James	03-DEC-81	41
Ford	03-DEC-81	41
Miller	23-JAN-82	41

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29) List employee names who joined in ~~on~~ FEB and
ON MONDAY (OR) FRIDAY

→ select ename, hiredate from emp where
to_char(hiredate, 'MON DAY') like 'FEB MONDAY--'
or to_char(hiredate, 'MON DAY') like
'FEB FRIDAY---';

ENAME

HIREDATE

ALLEN

20-FEB-81