

# 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-4

Answer the following questions using EMP table using the aggregate functions.

- 1) List employee names and their hiredates sorted in order of their experience.
- select ename, hiredate, round((months\_between(sysdate, hiredate))/12) exp from emp order by exp;

ENAME	HIREDATE	EXP
ADAMS	12-JAN-83	40
SCOTT	09-DEC-82	40
FORD	03-DEC-81	41
JAMES	03-DEC-81	41
MILLER	23-JAN-82	41
KING	17-NOV-81	41
TURNER	08-SEP-81	42
BLAKE	01-MAY-81	42
MARTIN	28-SEP-81	42
JONES	02-APR-81	42
WARD	22-FEB-81	42
ALLEN	20-FEB-81	42

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SMITH	17-DEC-80	42
CLARK	09-JUN-81	42

2) List managers names and their joining dates  
Completely spelled in alphabetical order of  
names.

→ select ename, to\_char(hiredate, 'DDSP MON YEAR')  
HD from emp where job = 'MANAGER';

ENAME	HD
JONES	TWO APR Nineteen Eighty-One
Blake	One MAY Nineteen Eighty-One
Clark	Nine JUN Nineteen Eighty-One

3) List employee names and their experience in  
years with names arranged in descending  
order.

→ select ename, round((months\_between(sysdate,  
hiredate))/12) exp from emp order by ename  
desc;

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ENAME	EXP
Ward	42
Turner	42
Smith	42
Scott	40
Miller	41
Martin	42
King	41
Jones	42
James	41
Ford	41
Clark	42
Blake	42
Allen	42
Adams	40

- 4) List employee names having a minimum of 40 years experience sorted on experience.
- select ename, round((months\_between(sysdate, hiredate))/12) exp from emp where round((months\_between(sysdate, hiredate))/12) > 40

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ENAME EXP

Ford	41
James	41
Miller	41
King	41
Martin	42
Clark	42
Turner	42
Jones	42
Ward	42
Allen	42
Smith	42
Blake	42

- 5) List employee names with all capital letters,  
with all small letters and with first letter only  
as capital
- Select ename, upper(ename), lower(ename), initcap(ename)  
from emp;
- 6) List employee names with length of name; sorted  
on length:

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→ Select ename, length(ename) from emp order by length(ename);

ENAME	LENGTH(ENAME)
Ford	4
King	4
Ward	4
Blake	5
Scott	5
Jones	5
James	5
Allen	5
Smith	5
Clark	5
Adams	5
Martin	6
Turner	6
Miller	6

7) List employee names appending Sri to the beginning and Guru at the end.

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- Select 'Sri' || ename || 'Guru' from emp;
- 8) List employee names and month names of joining:
- Select ename, to\_char(hiredate, 'MONTH') from emp;
- 9) List employee names and year of joining in words.
- Select ename, to\_char(hiredate, 'YEAR') from emp;
- 10) List employee names, job and salary with 5 hyphens in between.
- select ename || '-----'|| job || '-----'|| sal  
from emp;

ENAME || '-----'|| JOB || '-----'|| SAL

SMITH ----- CLERK ----- 800

:

:

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11) List employee names and position of 1<sup>st</sup> occurrence of I in their name.

→ Select ename, instr(ename, 'I') from emp;

<u>ENAME</u>	<u>INSTR(ENAME, 'I')</u>
SMITH	3
ALLEN	0
WARD	0
JONES	0
MARTIN	5
BLAKE	0
CLARK	0
SCOTT	0
KING	2
TURNER	0
ADAMS	0
JAMES	0
FORD	0
MILLER	2

12) List employee names and the string without 1<sup>st</sup> and last character in their name.

→ Select ename, substr(ename, 2, length(ename) - 2);

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13) List employees who joined between Apr'81 and Apr'82

Select ename, hiredate from emp where  
hiredate between '01-APR-81' and  
'30-APR-82'

14) List max sal, min sal and average sal of  
deptno = 10, 30.

→ select max(sal), min(sal), avg(sal), deptno  
from emp where deptno in (10, 30) group by  
deptno;

<u>MAX(SAL)</u>	<u>MIN(SAL)</u>	<u>AVG(SAL)</u>	<u>DEPTNO</u>
2850	950	1566.66667	30
5000	1300	2916.66667	10

15) List the designation in dept 30 but not in 20.

→ (Select job from emp where deptno = 30) minus  
(Select job from emp where deptno = 20);

JOB

SALESMAN

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- 16) List the no. of employees in each department along with dept nos:

→ Select count(ename), deptno from emp group by deptno;

COUNT(ENAME)	DEPT NO
6	30
5	20
3	10

- 17) List the no. of employees joined yearwise:

→ Select count(ename), to\_char(hiredate, 'YY') Year from emp group by to\_char(hiredate, 'YY');

COUNT(ENAME)	YE
10	81
2	82
1	83
1	80

- 18) List the no. of employees job wise.

→ Select count(ename), job from emp group by job;

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count(ename)	JOB
4	Clerk
4	Salesman
1	President
3	Manager
2	Analyst

19) List max, min sal, avg sal dept wise.

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

MAX(SAL)	MIN(SAL)	AVG(SAL)	DEPT NO
2850	950	1566.66667	30
3000	800	2175	20
5000	1300	2916.66667	10

20) List max sal, min sal, avg sal job wise.

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

MAX(SAL)	MIN(SAL)	AVG(SAL)	JOB
1300	800	1037.5	Clerk

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1600	1250	1400	Salesman
5000	5000	5000	President
2975	2450	2758.33333	Manager
3000	3000	3000	Analyst

21) List max sal, min sal for the jobs MANAGER and CLERK.

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

MAX(SAL)	MIN(SAL)	JOB
1300	800	Clerk
2975	2450	Manager

22) List max sal, min sal and average salary of the depts ; having a min 3 employees.

→ Select max(sal), min(sal), avg(sal), deptno, count(ename) from emp group by deptno having count(ename) > 3;

MAX(SAL)	MIN(SAL)	Avg(Sal)	DeptNo	Count(ENAME)
2850	950	1566.66667	30	6
3000	800	2175	20	5

23) List the no. of employees in each job in each department.

→ Select job, deptno, count(ename) from emp group by job, deptno order by deptno;

JOB	DEPTNO	COUNT(ENAME)
Clerk	10	1
Manager	10	1
President	10	1
Analyst	20	2
Clerk	20	2
Manager	20	1
Clerk	30	1
Manager	30	1
Salesman	30	4

24) List MGR and the no. of employees report to

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them in the sorted order

→  $\uparrow$   
Select distinct(mgr), count(ename) from emp  
group by mgr. order by mgr;

20

MGR	COUNT(ENAME)
7566	2
7698	5
7782	1
7788	1
7839	3
	1

25) List emp numbers of employees to whom  
a minimum of 3 people report.

26

→ select distinct (mgr), count (ename) from  
emp group by mgr having count(ename) > 3;

MGR	COUNT(ENAME)
7698	5

26) List dept nos. having a min. of 3 persons:

→ select deptno, count(deptno) from emp group by

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deptno having count(deptno)  $\geq 3$ ;

<u>DEPTNO</u>	<u>COUNT(DEPTNO)</u>
30	6
20	5
10	3.

27) List names of jobs having a min of 3 persons joined in that job.

→ select distinct(job), count(job) from emp group by job having count(job)  $\geq 3$ ;

<u>JOB</u>	<u>COUNT(JOB)</u>
Clerk	4
Salesman	4
Manager	3

28) List names of months in which a min of 3 persons joined.

→ select to\_char(hiredate, 'MON'), count(\*) from emp group by to\_char(hiredate, 'MON') having

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- 29) List hiredates of employees having 2 or more employees having the same hiredate.  
→ Select to\_char(hiredate, 'DD'), count(\*) from emp group by to\_char(hiredate, 'DD') having count(\*) >= 2 order by count(\*) ;

<u>29)</u>	<u>To</u>	<u>COUNT(*)</u>
	09	2
	03	2
	17	2