

Bapatla Engineering College :: Bapatla
Department of Information Technology
DBMS LAB

WORK SHEET-1(USING EMP TABLE)

1. List empno, empname and salary.
2. List the names of all MANAGERS.
3. list all clerks in deptno. 30.
4. List the employees to who manager is 7698.
5. List jobs in dept 20.
6. List employee names whose salary is between 2000 and 3000.
7. List employees in the departments 10, 20.
8. List employee names which begin with S.
9. List employee names having 'A' in their names.
10. List employees who have joined in JAN.
11. List employees who have joined in the year 81.
12. List all distinct jobs.
13. List employee names in alphabetical order.
14. List employee names alphabetically department wise.
15. List employee names alphabetically job wise.
16. List employee numbers, name sal, DA(15% OF SAL) and PF (10% of sal).
17. List employee names having an experience more than 15 years.
18. List employee names whose commission is NULL.
19. list employees who do not report to anybody.
20. List maximum sal, minimum sal, average sal.
21. List the numbers of jobs.
22. List the numbers of people and average salary in deptno 30.
23. List maximum sal and minimum sal in the designations SALESMAN and CLERK.
24. List the numbers of people and average salary of employees joined in 81, 82 and 83.
25. List jobs that are unique to deptno 20 set operations (Add more problems).
26. Display today's date and present time.
27. List employee names and their joining date in the following formats
 - A. SMITH 17th DEC NINETEEN EIGHTY
 - B. SMITH SEVENTEENTH DEC NINETEEN EIGHTY
 - C. SMITH Week day of joining
 - D. SMITH 17/12/80
28. List employee names and their experience in years
29. List employee names who joined in DEC and on Monday or Friday.
30. Display a given date as a string in different formats.

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WORKSHEET-II (USING EMP TABLE)

- 1) List employee names and their hire dates sorted in the order of their experience.
- 2) List managers names and their joining dates completely spelled in alphabetical order of names.
- 3) List employee names and their experience in years with names arranged in descending order.
- 4) List employee names having a minimum of 2 years experience sorted on experience.
- 5) List employee names with all capital letters, with all small letters and with first letter only as capital.
- 6) List employee names with length of the name sorted on length.
- 7) List employee names appending Sri to the beginning and Garu to the end.
- 8) List employee names and month names of joining.
- 9) List employee names and year of joining in words.
- 10) List employees names, job and salary with 5 hyphens in between.
- 11) List employee names and position of first occurrence of I in their name.
- 12) List employee names and the string without first character and last character in their name.
- 13) List employees who joined between Apr 81 and Apr 82.
- 14) List max sal, min sal and average sal of depts. 10, 30.
- 15) List the designation in dept 30 but not in 20.
- 16) List the number of employees in each department along with dept numbers.
- 17) List number of employees joined year wise.
- 18) List number of employees job wise.
- 19) List max sal, min sal, average salary dept wise.
- 20) List max sal, min sal, average salary job wise.
- 21) List max sal, min sal for the jobs MANAGER and CLERK.
- 22) List max sal, min sal AND average salary of the depts. Having a minimum 3 employees.
- 23) List the number of employees in each job in each department.
- 24) List MGR and the number of employees report to them in the sorted order.
- 25) List emp numbers of employees to whom a minimum of 3 people report.
- 26) List dept numbers having a minimum of 3 persons.
- 27) List names of jobs having a minimum of 3 persons in that job.
- 28) List names of months in which a minimum of 3 persons joined.
- 29) List hiredates of employees having 2 or more employees having the same hiredate.
- 30) List departments having minimum of 3 people having a minimum of 17 years of experience.

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WORKSHEET-III (USING EMP TABLE)

1. List employee names and dept names with which they are associated.
2. List employee names, salary and their grade.
3. List employee name, dept name along with grade.
4. List employee names and their manager names.
5. List dept name and Manager name.
6. List managers of various depts.. Along with grade sorted on grade.
7. List employees having commission along with grade.
8. List employees names with job manager along their manager names to whom they have to report.
9. List names of employees who are working in the same dept of their manager.
10. List names of employees who are not working in the same dept of their manager.
11. List names of employees having first character in their name first character in their dept name same.
12. List employees who joined in the present month in any year and having grade and last digit in the year are same.
13. List names of employees whose empno, mgr and grade given the same remainder when divided by 2.
14. List the names of employees having grade and tens position in the deptno same.
15. List the names of employees having grade and tens position in the deptno different.
16. List employee name,deptname and dept location of those employees having any of these three same length
17. List names of employees having month number of hiredate and grade same
18. List names of clerks who are reporting to analyst.
19. List emp names and thrie manager names having same grade.
20. List emp names of employees who joined before their manager's joining date.

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TABLES CREATION FOR LABSHEET-1

Create the following tables

1. EMPLOYEE(FNAME,MINIT,LNAME,SSN,SEX,SALARY,SUPERSSN,DNO)

CONSTRAINTS:

FNAME,LNAME,SSN,DNO NOT NULL
PRIMARY KEY(SSN)
FOREIGN KEY (SUPERSSN) REFERENCES EMPLOYEE(SSN)
FOREIGN KEY(DNO) REFERENCES DEPARTMENT(DNUMBER)

2.DEPARTMENT(DNAME,DNUMBER,MGRSSN) CONSTRAINTS:

DNAME,DNUMBER,MGRSSN NOTNULL
PRIMARY KEY (DNUMBER)
UNIQUE (DNAME),
FOREIGN KEY(MGRSSN) REFERENCES EMPLOYEE(SSN)

3. DEPT_LOCATIONS(DNUMBER,DLOCATION)

CONSTRAINTS:

DNUMBER.DLOCATION NOTNULL
PRIMARY KEY(DNUMBER,DLOCATION)
FOREIGN KEY(DNUMBER) REFERENCES DEPARTMENT(DNUMBER)

4. PROJECT(PNAME,PNUMBER,PLOCATIOIM,DNUM)

CONSTRAINTS:

PNAME.PNUMBER.DNUM NOTNULL
PRIMARY KEY(PNUMBER)
UNIQUE(PNAME)
FOREIGN KEY(DNUM) REFERENCES DEPARTMENT(DNUMBER)

5. WORKS_ON(ESSM,PNO,HOURS)

CONSTRAINTS:

ESSN,PNO NOTNULL
PRIMARY KEY(ESSN,PNO)
FOREIGN KEY(ESSN) REFERENCES EMPLOYEE(SSN)
FOREIGN KEY(PNO) REFERENCES PROJECT(PNUMBER)

6. DEPENDENT(ESSN,D_NAME,SEX,RELATIONSHIP)

CONSTRAINTS':

ESSN,D_NAME NOTNULL
PRIMARY KEY(ESSN,D_NAME)
FOREIGN KEY(ESSN) REFERENCES EMPLOYEE(SSN)

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EMP DATABASE

EMPLOYEE

ENAME	MINIT	LNAME	SSN	SEX	SALARY	SUPERSSN	DNO
JOHN	B	SMITH	2345	M	30000	3344	5
FRANKLIN	T	WONG	3344	M	40000	8866	5
ALICIA	J	ZELAYA	9988	F	25000	8765	4
JENNIFER	S	WALLACE	8765	F	43000	8866	4
RAMESH	K	NARAYANA	6688	M	38000	3344	5
JOYCE	A	ENGLISH	5345	F	25000	3344	5
AHMAD	V	JABBER	8798	M	25000	8765	4
JAMES	E	BORG	8866	M	55000	NULL	1

DEPARTMENT

DNAMNE	DNUMBER	MGRSSN
RESEARCH	5	3344
ADMINISTRATION	4	8765
HEADQUATERS	1	8866

DEPT_LOCATION

DNUMBER	DLOCATION
1	HOUSTON
4	STAFFORD
5	BELLARIE
5	SUGARLAND
5	HOUSTON

WORKS_ON

ESSN	PNO	HOURS
2345	1	32.5
2345	2	7.5
6688	3	40
5345	1	20
5345	2	20
3344	2	10
3344	3	10
3344	10	10
3344	20	10
9988	30	30
9988	10	10
8798	10	35
8798	20	5
8765	20	20
8765	30	15
8866	30	NULL
8866	1	NULL

DEPENDENT

ESSN	D_NAME	SEX	RELATIONSHIP
3344	ALICE	F	DAUGHTER
3344	THEODORE	M	SON
3344	JOY	F	SPOUSE
8765	ABNER	M	SPOUSE
2345	MICHAEL	M	SON
2345	ALICE	F	DAUGHTER
2345	ELIZABETH	F	SPOUSE

PROJECT

PNAME	PNUMBER	PLOCATION	DNUM
PRODUCT_X	1	BELLARIE	5
PRODUCT_Y	2	SUGARLAND	5
PRODUCT_Z	3	HOUSTON	5
COMPUTERIZATION	10	STAFFORD	4
REORGANIZATION	20	HOUSTON	1
NEWBENEFITS	30	STAFFORD	4

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Labsheet –1

1. Retrieve names of Employees who work for the Research Department.
2. For each project located in Stafford, list the project number, controlling department number and the department manager's last name.
3. For each Employee retrieve the employee's first and last name of his/her supervisor.
4. List all project number for projects that involve an Employee whose last name is SMITH, either as a worker or as a MANAGER of the Department that controls the project.
5. Retrieve the list of Employees and the projects they are working on order by department and with in each department ordered Alphabetically by last name and first name.
6. Retrieve the name of each employee who has the dependent with the same first name and same sex as the employee.
7. Retrieve the name of each employee who works on all the projects controlled by department no. 5.
8. Retrieve the names of employees who have no dependents.
9. List the names of Managers who have at least one dependent.
10. For each project on which more than two employees work, retrieve the project number, the project name, and the no. of employees who work on the project.
11. For each project, retrieve the project number, the project name and the no. of employees from department 5 who work on the project.
12. For each department that has more than 5 employees, retrieve the department number and the no. of its employees who are making more than 40,000.

PL/SQL Programs

1. Write a PL/SQL program to print employee number of an employee as well as the corresponding MGR NO.
2. Write a PL/SQL program using FOR/WHILE LOOPS to list out month names and month numbers.
3. Write a PL/SQL program to update commission of an employee (employee number as input) As per the following norms.
 - i) If commission is NULL, make it as 10% of salary
 - ii) If comm. < 200 make comm. = 200
 - iii) If comm. < 300 make comm. = 300
4. Write a PL/SQL program to list out .
DEPT NO, DNAME, NO OF EMPLOYEES, MAX(SAL), MIN(SAL),
AVG(SAL) In each dept. If a dept has no employees then display
"employees are not there in this dept".
5. write a PL/SQL program to get no. of employees whose salary is in between given range.