Tables for Exercise

Que: 1 Create the following tables:

Table Name : EMP

Description: Use to store information about Employee of company

Column Name	Data Type	Size	Attributes
Empno	Numeric	4	Primary Key
Ename	Varchar	10	Not Null
Job	Varchar	9	
Mgr	Number	4	
Hiredate	Date		
Sal	Numeric	7,2	
Comm.	Numeric	7,2	
Deptno	Numeric	2	Not Null / / Foreign key references deptno of Dept Table

Data:

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	19-APR-87	3000		20
7839	KING	PRESIDENT		17-NOV-81	5000		10
7844	TURNER	SALESMAN	7698	08-SEP-81	1500		30
7876	ADAMS	CLERK	7788	23-MAY-87	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

Table Name: DEPT

Description: Use to store information about departments of company

Column Name	Data Type	Size	Attributes
deptno	Numeric	2	Primary Key.
Dname	Varchar	14	Not Null
Loc	Varchar	13	

Data:

deptno	Dname	Loc
10	Accounting	New York
20	Research	Dallas
30	Sales	Chicago
40	Operations	Boston

Table Name: SalGrade

Column Name	Data Type	Size	Attributes
Grade	Numeric		
Losal	Numeric		
Hisal	numeric		

Data:

Grade	Losal	Hisal
1	700	1200
2	1201	1400
3	1401	2000
4	2001	3000
5	3001	9999

Que: 2 Perform the following Queries

SQL-ASSIGNMENT #1 BASIC QUERIES

USE THE FOLLOWING TABLES:

EMP

(EMPNO, ENAME, JOB, SAL, HIREDATE, COMM, MGR, DEPTNO)

DEPT

(DEPTNO, DNAME, LOC)

SALGRADE

(GRADE, LOSAL, HISAL)

PERFORM THE FOLLOWING QUERIES:

- 1. LIST ALL ROWS OF THE TABLE EMP.
- 2. DISPLAY THE STRUCTURE OF THE TABLE EMP.
- 3. LIST ALL TABLES.
- 4. LIST ALL EMPLOYEES NUMBER FROM EMP.
- 5. LIST ALL EMPLOYEES NAME AND DESIGNATION FROM EMP.
- 6. LIST ALL COMMISSION FROM EMP.
- 7. LIST ALL MGR FROM EMP.
- 8. LIST ALL DEPARTMENTS NUMBER FROM EMP.
- 9. LIST ALL EMPLOYEES NUMBER, EMPLOYEES NAME, JOBS, MGR FROM EMP.
- 10. LIST ALL EMPLOYEES NAME, MGR FROM EMP.

- 11. LIST ALL JOB, COMMISSION FROM EMP.
- 12. LIST ALL EMPLOYEES NAME, DEPARTMENTS NUMBER FROM EMP.
- 13. LIST ALL DEPARTMENTS NUMRER, EMPLOYEES NAME, SALARIES, JOBS FROM EMP.
- 14. LIST ALL DEPARTMENTS NO AND NAME FROM DEPARTMENT.
- 15. LIST ALL GRADES FROM SALGRADE.
- 16. LIST ALL LO-SAL, HI-SAL, GRADE FROM SALGRADE.

SQL-ASSIGNMENT#2 BASIC QUERIES

PERFORM THESE QUERIES:

- 1. LIST ALL EMPLOYEES WHO ARE MANAGERS.
- 2. LIST ALL EMPLOYEES WHO ARE PRESIDENTS.
- 3. LIST ALL EMPLOYEES WHO ARE EITHER MANAGER OR CLERK.
- 4. LIST ALL EMPLOYEES WHO ARE MANAGERS OF DEPARTMENT NUMBER 10.
- 5. LIST ALL EMPLOYEES WHO ARE WORKNG IN DEPARTMENT NUMBER 10.
- 6. LIST ALL EMPLOYEES WHO ARE NOT BELONGING TO DEPARTMENT NUMBER 20, 30, 40 AND ARE NOT MANAGER.
- 7. LIST ALL EMPLOYEES WHO ARE EITHER MANAGER OF DEPARTMENT NUMBER 10 OR ARE ANALYST.
- 8. LIST ALL EMPLOYEES WHO ARE NOT PRESIDENT, ANALYST OR SALESMAN.
- 9. LIST ALL EMPLOYEES WHO WORK IN DEPARTMENT NUMBER 10 AND THEIR JOB IS CLERK.

SQL-ASSIONMENT #3

PERFORM THE FOLLOWING QUERIES

- 1. CHANGE THE COLUMN HEADING ENAME INTO YOUR NAME AND DISPLAY IT.
- CHANGE THE COLUMN HEADING SAL INTO SALARIES.
- CHANGE THE COLUMN HEADING ENAME INTO 'EMPLOYEE NAME' AND JOB INTO DESIGNATION.
- 4. LIST ALL 'MANAGER' AND ADD 100 RUPEES IN EACH SALARY.
- 5. LIST ALL EMFLOYEE AND ADD 1000 RUPEES AND SUBTRACT 4500 RUPEES IN EACH SALARY.
- 6. IF EMPLOYEE NAME IS SCOTT THEN ADD 100 RUPEES IN HIS SALARY.
- 7. LIST ALL EMPLOYEE AFTER ADDING 500 RUPEES, SUBTRACT 300 RUPEES AND DIVIDED BY 100 RUPEES FROM EACH SALARY.
- LIST ALL EMPLOYEES AND FIND FIVE PERCENT FROM EACH SALARY.
- 9. FIND EIGHT PERCENT OF SALESMEN SALARY.
- 10. FIND THE TWO MONTH SALARY OF EACH MANAGER.
- 11. FIND THE DAILY WAGES OF EACH EMPLOYEE.
- 12. DISPLAY THE COLUMN HEADING ANNSAL INSTEAD OF SAL*12.
- 13. COMBINE EMPNO AND ENAME. THEN CHANGE THE COLUMN HEADING AS EMPLOYEE.
- 14. JOIN ENAME AND JOB. THEN CHANGE THE COLUMN HEADING AS COMP NAME.
- 15. LIST ALL RECORDS AS FOLLOWS. SMITH IS CLERK AND HE IS WORKING IN DEPT NO 20 SINCE 12-MAR-1981.
- 16. FIND ANNUAL SALARY AND ADD COMM OF ALL EMPLOYEES.
- 17. LIST ALL DISTINCT DEPARTMENT NUMBER FROM EMP TABLE.
- DISPLAY DISTINCT VALUE OF DEPARTMENT NUMBER AND JOBS.
- LIST ALL EMPLOYEES WHO ARE NOT ELIGIBLE FOR RECEIVING COMMISSION AND ARE 'MANAGER'.
- 20. LIST ALL EMPLOYEES WHO ARE ELIGIBLE OF RECEIVING COMMISSION.
- 21. LIST ALL DISTINCT JOBS FROM THE TABLE EMP.
- 22. HOW MANY JOBS DO WE HAVE.

SQL-ASSIGNMENT #4

PERFORM THE FOLLOWING QUERIES:

- 1. LIST HIREDATE IN DESCENDING ORDER.
- LIST HIREDATE IN ASCENDINO ORDER.
- FIND ALL DEPARTMENT NAMES WITH THEIR DEPARTMENT NUMBERS WHILE NUMBERS GREATER THEN 20.
- 4. FIND THOSE EMPLOYEES WHOSE COMMISSION IS GREATER THEN THEIR SALARIES.
- 5. FIND THOSE EMPLOYEES WHOSE COMMISSION IS LESS THEN THEIR SALARIES.
- 6. FIND ALL EMPLOYEES THOSE SALARIES ARE BETWEEN 500 AND 1500.
- 7. FIND THOSE EMPLOYEES WHOSE MGR IS 7902, 7566, 7788.
- 8. TO FIND THOSE EMPLOYEES WHOSE MGR IS BETWEEN 7788 AND 7092.
- 9. LIST ALL EMPLOYEES WHOSE NAME START WITH 'S'.
- 10. LIST ALL EMPLOYEES HAVING FIRST NAME AS 'SCOTT'.
- LIST OF THOSE EMPLOYEES HAVING ONLY 5 CHARACTERS LONG NAME AND JOB AS A MANAGER.
- 12. LIST ALL EMPLOYEES WHO DOES NOT HAVE A MANAGER (WHOSE MANAGER IS NULL).
- 13. FIND THOSE EMPLOYEES WHOSE JOB DO NOT START WITH A'.
- 14. LIST OF THOSE EMPLOYEES WHOSE MGR IS NOT NULL.
- 15. LIST OF THOSE EMPLOYEES WHOSE JOBS ARE 'MANAGER OR CLERK' OF DEPARTMENT NUMBER 10.
- 16. FIND ALL MANAGERS AND SALESMEN THEIR SALARIES OVER 1500.
- 17. FIND THE AVERAGE SALARIES OF DIFFERENT JOBS.
- 18. FIND THE AVERACE SALARIES OF ALL JOBS EXCLUDING MANAGER.
- 19. FIND THE AVERACE SALARY OF EACH JOB WITHIN DEPARTMENT.
- 20. FIND THE AVERAGE SALARIES OF EACH DEPARTMENT.
- 21. FIND AVERAGE AND SUM OF THE SALARIES OF EACH JOB EXCLUDING SALESMEN', CLERK' AND 'MANAGER'.

SQL-ASSIGNMENT #5

PERFORM THE FOLLOWING QUERIES

- 1. FIND THE ABSOLUTE VALUE OF -18.
- 2. FIND THE ABSOLUTE VALUE OF 30.
- 3. FIND THE CELING VALUE OF 22.5.
- 4. FIND THE CEILING VALUE OF 31.2.
- 5. FIND THE FLOOR VALUE OF 37.2.
- 6. DISPLAY YOUR NAME IN LOWERCASE.
- 7. FIND THE SOUARE OF 6.
- 8. FIND THE FIRST AND SECOND CHARACTERS OF ENAMS.
- 9. DISPLAY THE YEAR ONLY FROM THE HIREDATE.
- 10. FIND THE SOUNDEX OF ALL ENAME.
- 11. FIND THE SOUNDEX OF THOSE EMPLOYEE WHOSE ENAME IS ALLEN.
- 12. FIND THE MINIMUM SALARY FROM THE TABLE EMP.
- 13. FIND THE MAXIMUM SALARY SROM THE TABLE EMP.
- 14. FIND THE LENGTH OF ALL ENAME.
- 15. FIND THE LENGTH OF JOB.
- 16. FIND THE VSIZE OF ENAME.
- 17. FIND THE VALUE OF 2 THROUGH ASCII VALUE.
- 18. FIND THE ROWID OF ALL EMPLOYEES.
- 19. FIND THE USER ID, WHICH ASSIGNED BY ORACLE.
- 20. FIND THE USER NAME, IN WHICH YOU ARE WORKING.
- 21. FIND THE VSIZE OF ALL EMPLOYEES WHO ARE WORKING N DEPARTMENT NUMBER 10.
- 22. FIND THE SUM OF ALL SALARIES.
- 23. FIND THE GRADE OF ALL EMPLOYEES.
- 24. FIND THOSE EMPLOYEES WHOSE DEPARTMENT LOCATION IS NEWYORK.
- 25. FIND THOSE EMPLOYEES WHO ARE WORKING IN ACCOUNTING DEPARTMENT.
- 26. DEFINE THE VALUL AS ANNUAL SALARY SAL*12+NVL(COMM,0) AND DISPLAY THE RESULT.
- 27. DEFINE THE VALUE AS ANNUAL SAL*12 AND DISPLAY THE RESULT.

- 28. LIST ALL EMPLOYEES WHO ARE WORKING IN 'SALES' DEPARTMENT.
- 29. LIST ALL EMPLOYEES WHOSE LOCATION IS 'NEW YORK' AND DEPARTMENT NAME IS ACCOUNTING'.
- 30. LIST ALL EMPLOYEES WHOSE LOCATION IS 'CHICAGO'.
- 31. FIND THE MANAGER OF 'SCOTT'.
- 32. FIND THE MANAGER OF 'BLAKE'.
- 33. FIND THE SALARIES OF THOSE EMPLOYEES WHO EARN MORE THEN JONES'.
- 34. LIST THOSE DEPARTMENT WHO DOSE NOT HAVE ANY EMPLOYEES.
- 35. FIND THE UNION OF DEPARTMENT NUMFER 10 AND DEPARTMENT NUMBER 30.
- FIND THE INTERSECT OF DEPARTMENT NUMBER 10 AND DEPARTMENT NUMBER 30.
- 37. FIND THE MINUS OF DEPARTMENT NUMBER 10 AND DEPARTMENT NUMBER 30.
- 38. FIND THE MINIMUM SALARIES WITH EMPLOYEE NAME.
- 39. FIND ALL EMPLOYEES WHO HAVE THE SAME JOB AS BLAKE.
- 40. FIND THE MINIMUM THREE SALARIES N EACH DEPARTMENT.
- 41. FIND ALL THE DEPARTMENTS, WHICH HAVE AN-AVERAGE SALARY IS GREATER THEN DEPARTMENT NUMBER 30.
- 42. FIND ALL EMPLOYEES IN DEPARTMENT NUMBER 10 WHOSE JOB S THE SAM AS THE EMPLOYEES JOB IN THE SALES DEPARTMENT.
- 43. FIND ALL EMPLOYEES WHO EARN MORE THAN THE AVERAGE SALARY OF EMPLOYEES IN THEIR OWN DEPARTMENT AND SORT BY DEPARTMENT NO.
- 44. FIND ALL EMPLOYEES WHO EARN MORE THAN ANY EMPLOYEE IN DEPARTMENT 30.
- 45. FIND THE JOB WHICH HAS THE HIGHEST AVERAGE SALARY.
- 46. FIND ALL JOBS WITH EITHER THE SAME OR AS 'JONES' OR SALARY GREATER THAN OR EQUAL TO FORD, ORDER BY JOB AND SALARY.
- 47. LIST ALL EMPLOYEES AND THEIR MANAGER IN TREE FORMAT.
- 48. LIST ALL EMPLOYEES AND THEIR MANAGER IN TREE FORMAT WITH LEVEL.
- 49. FIND THE AVERAGE SALARY AT EACH LEVEL OF THE EMPLOYEE TREE.

<u>SQL-ASSIGNMENT #6</u> MIXED QUERIES FOR SUBMIT.

PERFORM THE FOLLOWING QUERIES

- 1. DISPLAY THE STRUCTURE OF THE TABLE EMP.
- 2. DISPLAY SYSTEM DATE (USING SQL STATEMENT ONLY).
- 3. COUNT ALL EMPLOYEES.
- 4. DISPLAY THE SUM OF ALL EMPLOYEES SALARIES.
- 5. HOW MANY MANAGERS DO WE HAVE.
- 6. HOW MANY DEPARTMENTS DO WE HAVE.
- LIST AVERAGE SALARY OF EACH DEPARTMENT.
- 8. LIST AVERAGE SALARY OF EACH JOB.
- 9. FIND THE MAXIMUM, MINIMUM SAL OF ALL EMPLOYEES.
- 10. FIND THE DAY OF ALL EMPLOYEES WHEN THEY WERE HIRED.
- 11. FIND THE NEXT FRIDAY AFTER THE '12-MAR-98'.
- 12. FIND THE LAST DAY OF EACH HIREDATE.
- 13. LIST ALL EMPLOYEES WTH THEIR SALGRADE.
- 14. LIST ALL EMPLOYEES WHO WERE HIRED IN YEAR 1983.
- 15. LIST ALL EMPLOYEES WHO WERE HIRED BETWEEN 30-MAR-81 TO 01-JUN-82.
- 16. FIND THE INCOME TAX OF ALL EMPLOYEES @5% OF ITS ANNUAL SALARY.
- 17. DISPLAY ALL RECORDS IN FOLLOWING FORMAT (FOR ALL RECORDS) ON EMPLOYEE <NAME>WORKS IN DEPARTMENT<NAME> AND APPOINTED ON <DATE>.
- 18. FIND THE DURATION OF SERVICE OF ALL EMPLOYEES.
- 19. COUNT ALL EMPLOYEES WHO WERE HIRED AFTER 22-MAR-81.
- 20. LIST THE MOST EXPERIENCED EMPLOYEE.
- 21. DISPLAY THE DEPARTMENTS NUMSER AND THEIR GIVEN NAMES USING DECODE() FUNCTION. 10 ACCOUNTING.
- 20 RESEARCH...
- 30 SALES.
- 22. IN WHICH YEAR DID MOST PEOPLE JOIN THE COMPANY, DISPLAY THE YEAR AND NUMBER OF EMPLOYEE.
- 23. FIND THE FIRST OCCURRENCE OF THE LETTER 'L' IN EMPLOYEE NAME AND CHANGE 'L' WITH 'X'.
- 24. FIND THE EMPLOYEE WHO HAS AT LEAST ONE PERSON FOR REPORTING.

- 25. FIND ALL EMPLOYEES WHO'S DEPARTMENT IS NOT IN THE DEPT TABLE.
- 26. LIST EMPLOYEE IN ORDER (OF MANAGER EMPLOYEE TREE FORMAT).
- 27. DISPLAY THE DATE COLUMN AT THE LEFT SIDE OF THE EMP TABLE.
- 28. DISPLAY THE TITLE IN CENTER' REPORT OF THE EMPLOYEE TABLE' ON TABLE EMP.
- 29. DISPLAY 'PAGES AT THE RIGHT SIDE OF THE EMP TABLE.
- 30. DISPLAY AT THE END ON LEFT SIDE CONFIDENTIAL REPORT.