C:\Users\abhlad>sqlplus

SQL\*Plus: Release 11.2.0.2.0 Production on Sat Nov 3 09:18:29 2018

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Enter user-name: system

Enter password:

Connected to:

Oracle Database 11g Express Edition Release 11.2.0.2.0 - 64bit Production

SQL> CREATE TABLE DEPT

2 (

3 DEPTNO NUMERIC(2) CONSTRAINT DEPTNO\_DEPT\_PK PRIMARY KEY,

4 DNAME VARCHAR(14),

5 LOC VARCHAR(13)

6 );

Table created.

SQL> INSERT INTO DEPT VALUES (10,'ACCOUNTING','NEW YORK');

1 row created.

SQL> INSERT INTO DEPT VALUES (20,'RESEARCH','DALLAS');

1 row created.

SQL> INSERT INTO DEPT VALUES (30,'SALES','CHICAGO');

1 row created.

SQL> INSERT INTO DEPT VALUES (40,'OPERATIONS','BOSTON');

1 row created.

SQL> CREATE TABLE EMP

2 (

3 EMPNO NUMERIC(4) CONSTRAINT EMPNO\_EMP\_PK PRIMARY KEY,

4 ENAME VARCHAR(10),

5 JOB VARCHAR(9),

6 MGR NUMERIC(4),

7 HIREDATE DATE,

8 SAL NUMERIC(7,2),

9 COMM NUMERIC(7,2),

10 DEPTNO NUMERIC(2) CONSTRAINT DEPTNO\_DEPT\_FK REFERENCES DEPT(DEPTNO)

11 );

Table created.

SQL> INSERT INTO EMP VALUES (7369,'SMITH','CLERK',7902,'17-DEC-80',800,NULL,20);

1 row created.

SQL> INSERT INTO EMP VALUES (7499,'ALLEN','SALESMAN',7698,'20-FEB-81',1600,300,3

0);

1 row created.

SQL> INSERT INTO EMP VALUES (7521,'WARD','SALESMAN',7698,'22-FEB-81',1250,500,30

);

1 row created.

SQL> INSERT INTO EMP VALUES (7566,'JONES','MANAGER',7839,'02-APR-81',2975,NULL,2

0);

1 row created.

SQL> INSERT INTO EMP VALUES (7654,'MARTIN','SALESMAN',7698,'28-SEP-81',1250,1400

,30);

1 row created.

SQL> INSERT INTO EMP VALUES (7698,'BLAKE','MANAGER',7839,'01-MAY-81',2850,NULL,3

0);

1 row created.

SQL> INSERT INTO EMP VALUES (7782,'CLARK','MANAGER',7839,'09-JUN-81',2450,NULL,1

0);

1 row created.

SQL> INSERT INTO EMP VALUES (7788,'SCOTT','ANALYST',7566,'19-APR-87',3000,NULL,2

0);

1 row created.

SQL> INSERT INTO EMP VALUES (7839,'KING','PRESIDENT',NULL,'17-NOV-81',5000,NULL,

10);

1 row created.

SQL> INSERT INTO EMP VALUES (7844,'TURNER','SALESMAN',7698,'08-SEP-81',1500,0,30

);

1 row created.

SQL> INSERT INTO EMP VALUES (7876,'ADAMS','CLERK',7788,'23-MAY-87',1100,NULL,20)

;

1 row created.

SQL> INSERT INTO EMP VALUES (7900,'JAMES','CLERK',7698,'03-DEC-81','950',NULL,30

);

1 row created.

SQL> INSERT INTO EMP VALUES (7902,'FORD','ANALYST',7566,'03-DEC-81',3000,NULL,20

);

1 row created.

SQL> INSERT INTO EMP VALUES (7934,'MILLER','CLERK',7782,'23-JAN-82',1300,NULL,10

);

1 row created.

**ASSIGNMENT 1:**

1. Display all departments from department table.

SQL> select \*from DEPT;

DEPTNO DNAME LOC

---------- -------------- -------------

10 ACCOUNTING NEW YORK

20 RESEARCH DALLAS

30 SALES CHICAGO

40 OPERATIONS BOSTON

2. Display all employees from employee table.

SQL> 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

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

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

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

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

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

7844 TURNER SALESMAN 7698 08-SEP-81 1500 0

30

7876 ADAMS CLERK 7788 23-MAY-87 1100

20

7900 JAMES CLERK 7698 03-DEC-81 950

30

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

7902 FORD ANALYST 7566 03-DEC-81 3000

20

7934 MILLER CLERK 7782 23-JAN-82 1300

10

14 rows selected.

3. Select the employee in department 30.

SQL> SELECT EMPNO,ENAME FROM EMP WHERE DEPTNO=30;

EMPNO ENAME

---------- ----------

7499 ALLEN

7521 WARD

7654 MARTIN

7698 BLAKE

7844 TURNER

7900 JAMES

6 rows selected.

4. List the names, numbers and departmentno of all clerks.

SQL> SELECT ENAME,EMPNO,DEPTNO FROM EMP WHERE JOB='CLERK';

ENAME EMPNO DEPTNO

---------- ---------- ----------

SMITH 7369 20

ADAMS 7876 20

JAMES 7900 30

MILLER 7934 10

5. Find the depart numbers and the name of employee of all dept with Deptno greater or equal to 20.

SQL> SELECT DEPTNO,ENAME FROM EMP WHERE DEPTNO >=20;

DEPTNO ENAME

---------- ----------

20 SMITH

30 ALLEN

30 WARD

20 JONES

30 MARTIN

30 BLAKE

20 SCOTT

30 TURNER

20 ADAMS

30 JAMES

20 FORD

11 rows selected.

6. Find the employees whose commission is greater than their salary.

SQL> SELECT ENAME FROM EMP WHERE COMM > SAL;

ENAME

----------

MARTIN

7. Find the employees whose commission is greater than 60 percent of their salary.

SQL> SELECT ENAME FROM EMP WHERE (SAL\*0.6)<(COMM);

ENAME

----------

MARTIN

8. Find the employee whose commission is greater than 50 percent of their salary.

SQL> SELECT ENAME FROM EMP WHERE (SAL\*0.5)<(COMM);

ENAME

----------

MARTIN

9. List the name, job and salary of all employees in dept 20 who earn more than 2000.

SQL> SELECT ENAME,JOB,SAL FROM EMP WHERE ((COMM IS NULL AND SAL>2000) OR (COMM IS NOT NULL AND SAL+ COMM>2000)) AND DEPTNO=20;

ENAME JOB SAL

---------- --------- ----------

JONES MANAGER 2975

SCOTT ANALYST 3000

FORD ANALYST 3000

10. Find all salesmen in dept 30 whose salary is greater than or equal to Rs. 1500.

SQL> SELECT ENAME,JOB,SAL FROM EMP WHERE JOB='SALESMAN' AND DEPTNO=30 AND SAL>=1500;

ENAME JOB SAL

---------- --------- ----------

ALLEN SALESMAN 1600

TURNER SALESMAN 1500

11. Find all the employees whose job is either a president or manager.

SQL> SELECT ENAME,JOB,SAL FROM EMP WHERE JOB='SALESMAN' OR JOB='MANAGER';

ENAME JOB SAL

---------- --------- ----------

ALLEN SALESMAN 1600

WARD SALESMAN 1250

JONES MANAGER 2975

MARTIN SALESMAN 1250

BLAKE MANAGER 2850

CLARK MANAGER 2450

TURNER SALESMAN 1500

7 rows selected.

12. Find all managers who are not in dept 30.

SQL> SELECT ENAME FROM EMP WHERE JOB='MANAGER' AND DEPTNO != 30;

ENAME

----------

JONES

CLARK

13. Find the details of all managers and clerks in dept 10.

SQL> SELECT ENAME FROM EMP WHERE (JOB='MANAGER' OR JOB='CLERK') AND DEPTNO = 10;

ENAME

----------

CLARK

MILLER

14. Find the details of all manager (in any dept) and all clerks in dept 10

SQL> SELECT ENAME FROM EMP WHERE JOB='MANAGER' OR JOB='CLERK' AND DEPTNO = 10;

ENAME

----------

JONES

BLAKE

CLARK

MILLER

15. Find the details of all managers in dept 10 and all clerks in dept 20.

SQL> SELECT ENAME FROM EMP WHERE (JOB='MANAGER' AND DEPTNO=10 )OR (JOB='CLERK' AND DEPTNO = 20);

ENAME

----------

SMITH

CLARK

ADAMS

16. Find all employees who are neither clerks nor manager but whose salary is greater than or equal to Rs. 2000.

SQL> SELECT ENAME FROM EMP WHERE (JOB!='MANAGER' OR JOB!='CLERK') AND SAL>=2000 ;

ENAME

----------

JONES

BLAKE

CLARK

SCOTT

KING

FORD

6 rows selected.

17. Find the employees who earns between Rs. 1200 and Rs.1400.

SQL> SELECT ENAME FROM EMP WHERE ((COMM IS NULL AND SAL BETWEEN 1200 AND 1400) OR (COMM IS NOT NULL AND SAL+ COMM BETWEEN 1200 AND 1400));

ENAME

----------

MILLER

18. Find the employees who are clerks, analysts or salesman.

SQL> SELECT \* FROM EMP WHERE JOB='CLERKS' OR JOB='ANALYSTS' OR JOB='SALESMAN';

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

7499 ALLEN SALESMAN 7698 20-FEB-81 1600 300

30

7521 WARD SALESMAN 7698 22-FEB-81 1250 500

30

7654 MARTIN SALESMAN 7698 28-SEP-81 1250 1400

30

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

7844 TURNER SALESMAN 7698 08-SEP-81 1500 0

30

19. Find the employees who are not clerks, analyst or salesman.

SQL> SELECT \* FROM EMP WHERE JOB!='CLERK' AND JOB!='ANALYST' AND JOB != 'SALESMAN';

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

7566 JONES MANAGER 7839 02-APR-81 2975

20

7698 BLAKE MANAGER 7839 01-MAY-81 2850

30

7782 CLARK MANAGER 7839 09-JUN-81 2450

10

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

7839 KING PRESIDENT 17-NOV-81 5000

10

20. Find the employees who do not receive a commission i.e. commission is NULL.

SQL> SELECT \* FROM EMP WHERE COMM IS NULL;

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

7369 SMITH CLERK 7902 17-DEC-80 800

20

7566 JONES MANAGER 7839 02-APR-81 2975

20

7698 BLAKE MANAGER 7839 01-MAY-81 2850

30

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

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

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

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

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

7934 MILLER CLERK 7782 23-JAN-82 1300

10

10 rows selected.

21. Find the employee whose commission is Rs. 0.

SQL> SELECT \* FROM EMP WHERE COMM=0 AND COMM IS NOT NULL;

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

7844 TURNER SALESMAN 7698 08-SEP-81 1500 0

30

22. Find the different jobs of the employees receiving commission.

SQL> SELECT DISTINCT JOB FROM EMP WHERE COMM IS NOT NULL;

JOB

---------

SALESMAN

23. Find all employees who do not receive a commission or whose Commission is less than Rs. 100.

SQL> SELECT ENAME FROM EMP WHERE COMM IS NULL OR COMM <100;

ENAME

----------

SMITH

JONES

BLAKE

CLARK

SCOTT

KING

TURNER

ADAMS

JAMES

FORD

MILLER

11 rows selected.

24. The employees who not receiving commission are entailed to Rs. 250, Show the net earnings of all employees. (find about **nvl() )**

25. Find all employees whose total earnings are greater than Rs. 2000.

SQL> SELECT \* FROM EMP WHERE ((COMM IS NULL AND SAL>2000) OR (COMM IS NOT NULL AND SAL+ COMM>2000));

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

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

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

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

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

7902 FORD ANALYST 7566 03-DEC-81 3000

20

7 rows selected.

26. Find all employees whose names begin with m.

SQL> SELECT ENAME FROM EMP WHERE ENAME LIKE 'M%';

ENAME

----------

MARTIN

MILLER

27. Find all employees whose names end with m.

SQL> SELECT ENAME FROM EMP WHERE ENAME LIKE '%M';

no rows selected

28. Find all employees whose names contain the letter m.

SQL> SELECT ENAME FROM EMP WHERE ENAME LIKE '%M%';

ENAME

----------

SMITH

MARTIN

ADAMS

JAMES

MILLER

29. Find the employees whose names are 5 characters long and end with n.

SQL> SELECT ENAME FROM EMP WHERE ENAME LIKE '\_\_\_\_N';

ENAME

----------

ALLEN

30. Find the employees who have the letter r as the third letter in their name.

SQL> SELECT ENAME FROM EMP WHERE ENAME LIKE '\_\_R%';

ENAME

----------

WARD

MARTIN

TURNER

FORD

**2) Numeric, Character & Date Function**

31. Find all employees hired in month of February (of any year).

SQL> SELECT \* FROM EMP WHERE EXTRACT(MONTH FROM HIREDATE)=2;

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

7499 ALLEN SALESMAN 7698 20-FEB-81 1600 300

30

7521 WARD SALESMAN 7698 22-FEB-81 1250 500

30

32. Find all employees who were hired on the last day of the month.

SQL> SELECT \* FROM EMP WHERE HIREDATE=LAST\_DAY(HIREDATE);

no rows selected

33. Find the employees who were hired more than 12 years ago.

SQL> SELECT \* FROM EMP WHERE SYSDATE-HIREDATE>12;

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

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

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

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

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

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

7844 TURNER SALESMAN 7698 08-SEP-81 1500 0

30

7876 ADAMS CLERK 7788 23-MAY-87 1100

20

7900 JAMES CLERK 7698 03-DEC-81 950

30

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

7902 FORD ANALYST 7566 03-DEC-81 3000

20

7934 MILLER CLERK 7782 23-JAN-82 1300

10

14 rows selected.

34. Find the managers hired in the year 2007.

SQL> SELECT \* FROM EMP WHERE JOB='MANAGER' AND EXTRACT(YEAR FROM HIREDATE)=2007;

no rows selected

35. Display the names and the jobs of all employees, separated by ','(comma). For example (smith, clerk).

SQL> SELECT ENAME || ','|| JOB FROM EMP;

ENAME||','||JOB

--------------------

SMITH,CLERK

ALLEN,SALESMAN

WARD,SALESMAN

JONES,MANAGER

MARTIN,SALESMAN

BLAKE,MANAGER

CLARK,MANAGER

SCOTT,ANALYST

KING,PRESIDENT

TURNER,SALESMAN

ADAMS,CLERK

ENAME||','||JOB

--------------------

JAMES,CLERK

FORD,ANALYST

MILLER,CLERK

14 rows selected.

36. Display the names of all employees with the initial letter only in capitals.

SQL> SELECT INITCAP(ENAME) AS ENAME FROM EMP;

ENAME

----------

Smith

Allen

Ward

Jones

Martin

Blake

Clark

Scott

King

Turner

Adams

ENAME

----------

James

Ford

Miller

37. Display the names of all employees, right aligning them to 15 characters.

SQL> SELECT ENAME, LPAD(ENAME,15,'\*') FROM EMP;

ENAME LPAD(ENAME,15,'\*')

---------- -----------------------------------------------------

SMITH \*\*\*\*\*\*\*\*\*\*SMITH

ALLEN \*\*\*\*\*\*\*\*\*\*ALLEN

WARD \*\*\*\*\*\*\*\*\*\*\*WARD

JONES \*\*\*\*\*\*\*\*\*\*JONES

MARTIN \*\*\*\*\*\*\*\*\*MARTIN

BLAKE \*\*\*\*\*\*\*\*\*\*BLAKE

CLARK \*\*\*\*\*\*\*\*\*\*CLARK

SCOTT \*\*\*\*\*\*\*\*\*\*SCOTT

KING \*\*\*\*\*\*\*\*\*\*\*KING

TURNER \*\*\*\*\*\*\*\*\*TURNER

ADAMS \*\*\*\*\*\*\*\*\*\*ADAMS

ENAME LPAD(ENAME,15,'\*')

---------- -----------------------------------------------------

JAMES \*\*\*\*\*\*\*\*\*\*JAMES

FORD \*\*\*\*\*\*\*\*\*\*\*FORD

MILLER \*\*\*\*\*\*\*\*\*MILLER

14 rows selected.

38. Display the names of all employees, padding them to right up-to 15 characters with '-'.

SQL> SELECT ENAME, LPAD(ENAME,15,'-') FROM EMP;

ENAME LPAD(ENAME,15,'-')

---------- ------------------------------------------------------------

SMITH ----------SMITH

ALLEN ----------ALLEN

WARD -----------WARD

JONES ----------JONES

MARTIN ---------MARTIN

BLAKE ----------BLAKE

CLARK ----------CLARK

SCOTT ----------SCOTT

KING -----------KING

TURNER ---------TURNER

ADAMS ----------ADAMS

ENAME LPAD(ENAME,15,'-')

---------- ------------------------------------------------------------

JAMES ----------JAMES

FORD -----------FORD

MILLER ---------MILLER

14 rows selected.

39. Display the length of the name of all employees.

SQL> SELECT ENAME, LENGTH(ENAME) FROM EMP;

ENAME LENGTH(ENAME)

---------- -------------

SMITH 5

ALLEN 5

WARD 4

JONES 5

MARTIN 6

BLAKE 5

CLARK 5

SCOTT 5

KING 4

TURNER 6

ADAMS 5

ENAME LENGTH(ENAME)

---------- -------------

JAMES 5

FORD 4

MILLER 6

14 rows selected.

40. Display the names of all employees centering them with 20 characters.

SQL> SELECT ENAME, RPAD(LPAD(ENAME,10,'\*'),20,'#') FROM EMP;

ENAME

----------

RPAD(LPAD(ENAME,10,'\*'),20,'#')

--------------------------------------------------------------------------------

SMITH

\*\*\*\*\*SMITH##########

ALLEN

\*\*\*\*\*ALLEN##########

WARD

\*\*\*\*\*\*WARD##########

ENAME

----------

RPAD(LPAD(ENAME,10,'\*'),20,'#')

--------------------------------------------------------------------------------

JONES

\*\*\*\*\*JONES##########

MARTIN

\*\*\*\*MARTIN##########

BLAKE

\*\*\*\*\*BLAKE##########

ENAME

----------

RPAD(LPAD(ENAME,10,'\*'),20,'#')

--------------------------------------------------------------------------------

CLARK

\*\*\*\*\*CLARK##########

SCOTT

\*\*\*\*\*SCOTT##########

KING

\*\*\*\*\*\*KING##########

ENAME

----------

RPAD(LPAD(ENAME,10,'\*'),20,'#')

--------------------------------------------------------------------------------

TURNER

\*\*\*\*TURNER##########

ADAMS

\*\*\*\*\*ADAMS##########

JAMES

\*\*\*\*\*JAMES##########

ENAME

----------

RPAD(LPAD(ENAME,10,'\*'),20,'#')

--------------------------------------------------------------------------------

FORD

\*\*\*\*\*\*FORD##########

MILLER

\*\*\*\*MILLER##########

14 rows selected.

41. Display the names of all employees without any leading 'a'.

SQL> SELECT ENAME,TRIM(LEADING 'A' FROM ENAME) FROM EMP;

ENAME TRIM(LEADI

---------- ----------

SMITH SMITH

ALLEN LLEN

WARD WARD

JONES JONES

MARTIN MARTIN

BLAKE BLAKE

CLARK CLARK

SCOTT SCOTT

KING KING

TURNER TURNER

ADAMS DAMS

ENAME TRIM(LEADI

---------- ----------

JAMES JAMES

FORD FORD

MILLER MILLER

14 rows selected.

42. Display the names of all employees without any trailing 'r'.

SQL> SELECT ENAME,TRIM(TRAILING 'R' FROM ENAME) FROM EMP;

ENAME TRIM(TRAIL

---------- ----------

SMITH SMITH

ALLEN ALLEN

WARD WARD

JONES JONES

MARTIN MARTIN

BLAKE BLAKE

CLARK CLARK

SCOTT SCOTT

KING KING

TURNER TURNE

ADAMS ADAMS

ENAME TRIM(TRAIL

---------- ----------

JAMES JAMES

FORD FORD

MILLER MILLE

14 rows selected.

43. Show the first three characters of the names of all employees.

SQL> SELECT ENAME,SUBSTR(ENAME , 1, 3) FROM EMP;

ENAME SUBSTR(ENAME

---------- ------------

SMITH SMI

ALLEN ALL

WARD WAR

JONES JON

MARTIN MAR

BLAKE BLA

CLARK CLA

SCOTT SCO

KING KIN

TURNER TUR

ADAMS ADA

ENAME SUBSTR(ENAME

---------- ------------

JAMES JAM

FORD FOR

MILLER MIL

14 rows selected.

44. Show the last three characters of the names of all employees.

SQL> SELECT ENAME,SUBSTR(ENAME , -3,3) FROM EMP;

ENAME SUBSTR(ENAME

---------- ------------

SMITH ITH

ALLEN LEN

WARD ARD

JONES NES

MARTIN TIN

BLAKE AKE

CLARK ARK

SCOTT OTT

KING ING

TURNER NER

ADAMS AMS

ENAME SUBSTR(ENAME

---------- ------------

JAMES MES

FORD ORD

MILLER LER

14 rows selected.

45. Display the names of all employees replacing any 'a' with 'e'.

SQL> SELECT ENAME,REPLACE(ENAME , 'A','E') FROM EMP;

ENAME REPLACE(EN

---------- ----------

SMITH SMITH

ALLEN ELLEN

WARD WERD

JONES JONES

MARTIN MERTIN

BLAKE BLEKE

CLARK CLERK

SCOTT SCOTT

KING KING

TURNER TURNER

ADAMS EDEMS

ENAME REPLACE(EN

---------- ----------

JAMES JEMES

FORD FORD

MILLER MILLER

14 rows selected.

46. Display the names of all employees and the position at which the string 'ar' occurs in the name.

SQL> SELECT INSTR(ENAME,'AR') FROM EMP;

INSTR(ENAME,'AR')

-----------------

0

0

2

0

2

0

3

0

0

0

0

INSTR(ENAME,'AR')

-----------------

0

0

0

14 rows selected.

47. Show the salary of all employees rounding it to the nearest Rs. 1000. For example (3790 will be 4000)

SQL> SELECT ENAME,SAL,ROUND(SAL,-3) FROM EMP;

ENAME SAL ROUND(SAL,-3)

---------- ---------- -------------

SMITH 800 1000

ALLEN 1600 2000

WARD 1250 1000

JONES 2975 3000

MARTIN 1250 1000

BLAKE 2850 3000

CLARK 2450 2000

SCOTT 3000 3000

KING 5000 5000

TURNER 1500 2000

ADAMS 1100 1000

ENAME SAL ROUND(SAL,-3)

---------- ---------- -------------

JAMES 950 1000

FORD 3000 3000

MILLER 1300 1000

14 rows selected.

48. Show the daily salary of all employees assuming a month has 30 days.

SQL> SELECT ENAME,SAL,SAL/30 FROM EMP;

ENAME SAL SAL/30

---------- ---------- ----------

SMITH 800 26.6666667

ALLEN 1600 53.3333333

WARD 1250 41.6666667

JONES 2975 99.1666667

MARTIN 1250 41.6666667

BLAKE 2850 95

CLARK 2450 81.6666667

SCOTT 3000 100

KING 5000 166.666667

TURNER 1500 50

ADAMS 1100 36.6666667

ENAME SAL SAL/30

---------- ---------- ----------

JAMES 950 31.6666667

FORD 3000 100

MILLER 1300 43.3333333

14 rows selected.

49. Display the name of all employees, and their bonus. Assume each Employee gets a bonus of 20 percent of his salary subject to the Maximum of Rs. 500.

SQL> SELECT ENAME,SAL,(SAL\*0.2) AS BONUS FROM EMP WHERE SAL\*0.2<=500;

ENAME SAL BONUS

---------- ---------- ----------

SMITH 800 160

ALLEN 1600 320

WARD 1250 250

MARTIN 1250 250

CLARK 2450 490

TURNER 1500 300

ADAMS 1100 220

JAMES 950 190

MILLER 1300 260

9 rows selected.

50. Display the name of all employees, and their bonus. Assume each employee gets a bonus of 20 percent of his salary subject to the Maximum of Rs. 200.

SQL> SELECT ENAME,SAL,(SAL\*0.2) AS BONUS FROM EMP WHERE SAL\*0.2<=200;

ENAME SAL BONUS

---------- ---------- ----------

SMITH 800 160

JAMES 950 190

51. For each employee display the number of days passed since the employee joined the company.

SQL> SELECT ENAME ,(SYSDATE-HIREDATE) AS "NO OF DAYS" FROM EMP;

ENAME NO OF DAYS

---------- ----------

SMITH 13835.733

ALLEN 13770.733

WARD 13768.733

JONES 13729.733

MARTIN 13550.733

BLAKE 13700.733

CLARK 13661.733

SCOTT 11521.733

KING 13500.733

TURNER 13570.733

ADAMS 11487.733

ENAME NO OF DAYS

---------- ----------

JAMES 13484.733

FORD 13484.733

MILLER 13433.733

14 rows selected.

52. For each employee display the number of months passed since the Employee joined the company.

SQL> SELECT ENAME ,(SYSDATE-HIREDATE)/30 AS "NO OF MONTHS" FROM EMP;

ENAME NO OF MONTHS

---------- ------------

SMITH 461.191121

ALLEN 459.024454

WARD 458.957788

JONES 457.657788

MARTIN 451.691121

BLAKE 456.691121

CLARK 455.391121

SCOTT 384.057788

KING 450.024454

TURNER 452.357788

ADAMS 382.924454

ENAME NO OF MONTHS

---------- ------------

JAMES 449.491121

FORD 449.491121

MILLER 447.791121

14 rows selected.

53. Display the tenure of service in the years, months and days for all Employees in character format. Assume every month has 30 days.

SQL> SELECT ENAME ,(SYSDATE-HIREDATE) AS "NO OF DAYS",(SYSDATE-HIREDATE)/30 AS "NO OF MONTHS",(SYSDATE-HIREDATE)/360 FROM EMP;

ENAME NO OF DAYS NO OF MONTHS (SYSDATE-HIREDATE)/360

---------- ---------- ------------ ----------------------

SMITH 13835.7352 461.191174 38.4325978

ALLEN 13770.7352 459.024507 38.2520422

WARD 13768.7352 458.95784 38.2464867

JONES 13729.7352 457.65784 38.1381534

MARTIN 13550.7352 451.691174 37.6409311

BLAKE 13700.7352 456.691174 38.0575978

CLARK 13661.7352 455.391174 37.9492645

SCOTT 11521.7352 384.05784 32.00482

KING 13500.7352 450.024507 37.5020422

TURNER 13570.7352 452.35784 37.6964867

ADAMS 11487.7352 382.924507 31.9103756

ENAME NO OF DAYS NO OF MONTHS (SYSDATE-HIREDATE)/360

---------- ---------- ------------ ----------------------

JAMES 13484.7352 449.491174 37.4575978

FORD 13484.7352 449.491174 37.4575978

MILLER 13433.7352 447.791174 37.3159311

14 rows selected.

54. Display the employee details in the following manner. 'Miler joined on the twenty-third of January of the year nineteen hundred and eighty Two'.

SQL> SELECT ENAME ||' JOINED ON THE '|| TO\_CHAR(HIREDATE,'DY')||' OF '|| TO\_CHAR(HIREDATE,'MONTH')||' OF '|| TO\_CHAR(HIREDATE,'YEAR')

2 FROM EMP;

ENAME||'JOINEDONTHE'||TO\_CHAR(HIREDATE,'DY')||'OF'||TO\_CHAR(HIREDATE,'MONTH')||'

--------------------------------------------------------------------------------

SMITH JOINED ON THE WED OF DECEMBER OF NINETEEN EIGHTY

ALLEN JOINED ON THE FRI OF FEBRUARY OF NINETEEN EIGHTY-ONE

WARD JOINED ON THE SUN OF FEBRUARY OF NINETEEN EIGHTY-ONE

JONES JOINED ON THE THU OF APRIL OF NINETEEN EIGHTY-ONE

MARTIN JOINED ON THE MON OF SEPTEMBER OF NINETEEN EIGHTY-ONE

BLAKE JOINED ON THE FRI OF MAY OF NINETEEN EIGHTY-ONE

CLARK JOINED ON THE TUE OF JUNE OF NINETEEN EIGHTY-ONE

SCOTT JOINED ON THE SUN OF APRIL OF NINETEEN EIGHTY-SEVEN

KING JOINED ON THE TUE OF NOVEMBER OF NINETEEN EIGHTY-ONE

TURNER JOINED ON THE TUE OF SEPTEMBER OF NINETEEN EIGHTY-ONE

ADAMS JOINED ON THE SAT OF MAY OF NINETEEN EIGHTY-SEVEN

ENAME||'JOINEDONTHE'||TO\_CHAR(HIREDATE,'DY')||'OF'||TO\_CHAR(HIREDATE,'MONTH')||'

--------------------------------------------------------------------------------

JAMES JOINED ON THE THU OF DECEMBER OF NINETEEN EIGHTY-ONE

FORD JOINED ON THE THU OF DECEMBER OF NINETEEN EIGHTY-ONE

MILLER JOINED ON THE SAT OF JANUARY OF NINETEEN EIGHTY-TWO

14 rows selected.

SQL Queries

Page 3 of 3

**3) Ordering by Queries**

55. Display the details of all employees, sorted on the names.

SQL> SELECT \* FROM EMP ORDER BY ENAME;

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

7876 ADAMS CLERK 7788 23-MAY-87 1100

20

7499 ALLEN SALESMAN 7698 20-FEB-81 1600 300

30

7698 BLAKE MANAGER 7839 01-MAY-81 2850

30

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

7782 CLARK MANAGER 7839 09-JUN-81 2450

10

7902 FORD ANALYST 7566 03-DEC-81 3000

20

7900 JAMES CLERK 7698 03-DEC-81 950

30

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

7566 JONES MANAGER 7839 02-APR-81 2975

20

7839 KING PRESIDENT 17-NOV-81 5000

10

7654 MARTIN SALESMAN 7698 28-SEP-81 1250 1400

30

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

7934 MILLER CLERK 7782 23-JAN-82 1300

10

7788 SCOTT ANALYST 7566 19-APR-87 3000

20

7369 SMITH CLERK 7902 17-DEC-80 800

20

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

7844 TURNER SALESMAN 7698 08-SEP-81 1500 0

30

7521 WARD SALESMAN 7698 22-FEB-81 1250 500

30

14 rows selected.

56. Display the name of all employees, based on their tenure, with the oldest employee coming first.

SQL> SELECT ENAME,HIREDATE FROM EMP ORDER BY HIREDATE;

ENAME HIREDATE

---------- ---------

SMITH 17-DEC-80

ALLEN 20-FEB-81

WARD 22-FEB-81

JONES 02-APR-81

BLAKE 01-MAY-81

CLARK 09-JUN-81

TURNER 08-SEP-81

MARTIN 28-SEP-81

KING 17-NOV-81

JAMES 03-DEC-81

FORD 03-DEC-81

ENAME HIREDATE

---------- ---------

MILLER 23-JAN-82

SCOTT 19-APR-87

ADAMS 23-MAY-87

14 rows selected.

57. Display the names, job and salary of all employees sorted on jobs and Salary.

SQL> SELECT ENAME,HIREDATE FROM EMP ORDER BY JOB,SAL;

ENAME HIREDATE

---------- ---------

FORD 03-DEC-81

SCOTT 19-APR-87

SMITH 17-DEC-80

JAMES 03-DEC-81

ADAMS 23-MAY-87

MILLER 23-JAN-82

CLARK 09-JUN-81

BLAKE 01-MAY-81

JONES 02-APR-81

KING 17-NOV-81

MARTIN 28-SEP-81

ENAME HIREDATE

---------- ---------

WARD 22-FEB-81

TURNER 08-SEP-81

ALLEN 20-FEB-81

14 rows selected.

58. Display the names, job and salary of all employees, sorted on jobs and within job, sorted on the descending order of salary.

SQL> SELECT ENAME,JOB,SAL FROM EMP ORDER BY JOB,SAL DESC;

ENAME JOB SAL

---------- --------- ----------

FORD ANALYST 3000

SCOTT ANALYST 3000

MILLER CLERK 1300

ADAMS CLERK 1100

JAMES CLERK 950

SMITH CLERK 800

JONES MANAGER 2975

BLAKE MANAGER 2850

CLARK MANAGER 2450

KING PRESIDENT 5000

ALLEN SALESMAN 1600

ENAME JOB SAL

---------- --------- ----------

TURNER SALESMAN 1500

MARTIN SALESMAN 1250

WARD SALESMAN 1250

14 rows selected.

59. Display the names, job and salary of all employees, sorted on Descending order of job and within job, sorted on the descending order of salary.

SQL> SELECT ENAME,JOB,SAL FROM EMP ORDER BY JOB,SAL DESC;

ENAME JOB SAL

---------- --------- ----------

FORD ANALYST 3000

SCOTT ANALYST 3000

MILLER CLERK 1300

ADAMS CLERK 1100

JAMES CLERK 950

SMITH CLERK 800

JONES MANAGER 2975

BLAKE MANAGER 2850

CLARK MANAGER 2450

KING PRESIDENT 5000

ALLEN SALESMAN 1600

ENAME JOB SAL

---------- --------- ----------

TURNER SALESMAN 1500

MARTIN SALESMAN 1250

WARD SALESMAN 1250

14 rows selected.

60. Display the name, month and year of all employees, sorted on the month of their hire date irrespective of the year.

SQL> SELECT ENAME,EXTRACT(DAY FROM HIREDATE),EXTRACT(MONTH FROM HIREDATE),EXTRACT(YEAR FROM HIREDATE)

FROM EMP

ORDER BY EXTRACT(MONTH FROM HIREDATE);

ENAME EXTRACT(DAYFROMHIREDATE) EXTRACT(MONTHFROMHIREDATE)

---------- ------------------------ --------------------------

EXTRACT(YEARFROMHIREDATE)

-------------------------

MILLER 23 1

1982

ALLEN 20 2

1981

WARD 22 2

1981

ENAME EXTRACT(DAYFROMHIREDATE) EXTRACT(MONTHFROMHIREDATE)

---------- ------------------------ --------------------------

EXTRACT(YEARFROMHIREDATE)

-------------------------

JONES 2 4

1981

SCOTT 19 4

1987

ADAMS 23 5

1987

ENAME EXTRACT(DAYFROMHIREDATE) EXTRACT(MONTHFROMHIREDATE)

---------- ------------------------ --------------------------

EXTRACT(YEARFROMHIREDATE)

-------------------------

BLAKE 1 5

1981

CLARK 9 6

1981

TURNER 8 9

1981

ENAME EXTRACT(DAYFROMHIREDATE) EXTRACT(MONTHFROMHIREDATE)

---------- ------------------------ --------------------------

EXTRACT(YEARFROMHIREDATE)

-------------------------

MARTIN 28 9

1981

KING 17 11

1981

SMITH 17 12

1980

ENAME EXTRACT(DAYFROMHIREDATE) EXTRACT(MONTHFROMHIREDATE)

---------- ------------------------ --------------------------

EXTRACT(YEARFROMHIREDATE)

-------------------------

JAMES 3 12

1981

FORD 3 12

1981

14 rows selected.

61. Display the name, month and year of joining of all employees, sorted on the month of their hire date, and within that on the year, with the earliest year appearing first.

SQL> SELECT ENAME,EXTRACT(MONTH FROM HIREDATE),EXTRACT(YEAR FROM HIREDATE)

2 FROM EMP ORDER BY EXTRACT(MONTH FROM HIREDATE)

3 ,EXTRACT(YEAR FROM HIREDATE);

ENAME EXTRACT(MONTHFROMHIREDATE) EXTRACT(YEARFROMHIREDATE)

---------- -------------------------- -------------------------

MILLER 1 1982

ALLEN 2 1981

WARD 2 1981

JONES 4 1981

SCOTT 4 1987

BLAKE 5 1981

ADAMS 5 1987

CLARK 6 1981

TURNER 9 1981

MARTIN 9 1981

KING 11 1981

ENAME EXTRACT(MONTHFROMHIREDATE) EXTRACT(YEARFROMHIREDATE)

---------- -------------------------- -------------------------

SMITH 12 1980

JAMES 12 1981

FORD 12 1981

14 rows selected.