

Assignment 2

1. Display the Name, manager Id, and hire date of all employees who are either clerk or works in dept 20. the date should be in the following format:

DATE_HIRED

Seventeenth December, 1980

Second April, 1981

Query: SELECT ENAME, MGR, INITCAP(TO_CHAR(HIREDATE, 'ddspth month'," yyyy'))
AS DATE_HIRED FROM EMP WHERE JOB='CLERK' OR DEPTNO=20;

Output:

ENAME	MGR	DATE_HIRED
SMITH	7902	Seventeenth December , 1980
JONES	7839	Second April , 1981
SCOTT	7566	Nineteenth April , 1987
ADAMS	7788	Twenty-Third May , 1987
JAMES	7698	Third December , 1981
FORD	7566	Third December , 1981
MILLER	7782	Twenty-Third January , 1982

2. List the employee name and old salary and new increased salary by 25% and expressed as a whole number.

Query: SELECT ENAME, SAL AS OLD_SALARY, ROUND(1.25*SAL) AS NEW_SALARY
FROM EMP;

Output:

ENAME	OLD_SALARY	NEW_SALARY
SMITH	800	1000
ALLEN	1600	2000
WARD	1250	1563
JONES	2975	3719
MARTIN	1250	1563
BLAKE	2850	3563
CLARK	2450	3063
SCOTT	3000	3750
KING	5000	6250
TURNER	1500	1875
ADAMS	1100	1375
JAMES	950	1188
FORD	3000	3750
MILLER	1300	1625

3. List the employee name and salary where name is displayed as left justified and salary with right justified.

Query: SELECT RPAD(ENAME,10) AS NAME, LPAD(SAL,10) AS SALARY FROM EMP;

Output:

NAME	SALARY
SMITH	800
ALLEN	1600
WARD	1250
JONES	2975
MARTIN	1250
BLAKE	2850
CLARK	2450
SCOTT	3000
KING	5000
TURNER	1500
ADAMS	1100
JAMES	950
FORD	3000
MILLER	1300

4. Produce the output as follows(for all employees)

ROLE OF THE EMPLOYEE

Name1 (<Job of Name 1>)

Name2 (<Job of Name 2>)

Note: Only first character of Name and job will be in uppercase.

Query: SELECT INITCAP(ENAME || '(' || JOB || ')') AS "ROLE OF THE EMPLOYEE" FROM EMP;

Output:

ROLE OF THE EMPLOYEE
Smith(Clerk)
Allen(Salesman)
Ward(Salesman)
Jones(Manager)
Martin(Salesman)
Blake(Manager)
Clark(Manager)
Scott(Analyst)
King(President)
Turner(Salesman)
Adams(Clerk)
James(Clerk)
Ford(Analyst)
Miller(Clerk)

5. Give the details of an employees with job is clerk (enter the job value clerk as input).

Query: SELECT * FROM EMP WHERE JOB='CLERK';

Output:

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	PHONENO	ADDRESS
7369	SMITH	CLERK	7902	17-DEC-80	800	-	20	-	-
7876	ADAMS	CLERK	7788	23-MAY-87	1100	-	20	-	-
7900	JAMES	CLERK	7698	03-DEC-81	950	-	30	-	-
7934	MILLER	CLERK	7782	23-JAN-82	1300	-	10	-	-

6. Display each employee name with hiredate and salary review date. Assume that date is one year after hiredate. Order the output in ascending review date order.

Query: SELECT ENAME, HIREDATE, ADD_MONTHS(HIREDATE,12) AS "SALARY REVIEW DATE" FROM EMP ORDER BY "SALARY REVIEW DATE";

Output:

ENAME	HIREDATE	SALARY REVIEW DATE
SMITH	17-DEC-80	17-DEC-81
ALLEN	20-FEB-81	20-FEB-82
WARD	22-FEB-81	22-FEB-82
JONES	02-APR-81	02-APR-82
BLAKE	01-MAY-81	01-MAY-82
CLARK	09-JUN-81	09-JUN-82
TURNER	08-SEP-81	08-SEP-82
MARTIN	28-SEP-81	28-SEP-82
KING	17-NOV-81	17-NOV-82
JAMES	03-DEC-81	03-DEC-82
FORD	03-DEC-81	03-DEC-82
MILLER	23-JAN-82	23-JAN-83
SCOTT	19-APR-87	19-APR-88
ADAMS	23-MAY-87	23-MAY-88

7. Find the employees(s) who earn the highest salary in each job type sort in descending salary order(Use IN operator and subqueries).

Query: SELECT * FROM EMP WHERE SAL IN (SELECT MAX(SAL) FROM EMP GROUP BY JOB) ORDER BY SAL DESC;

Output:

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	PHONENO	ADDRESS
7839	KING	PRESIDENT	-	17-NOV-81	5000	-	10	-	-
7788	SCOTT	ANALYST	7566	19-APR-87	3000	-	20	-	-
7902	FORD	ANALYST	7566	03-DEC-81	3000	-	20	-	-
7566	JONES	MANAGER	7839	02-APR-81	2975	-	20	-	-
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30	-	-
7934	MILLER	CLERK	7782	23-JAN-82	1300	-	10	-	-

8. Find the most recently hired employee in each department (give number only).

Query: SELECT EMPNO FROM EMP E WHERE HIREDATE IN(SELECT MAX(HIREDATE) FROM EMP WHERE E.DEPTNO=DEPTNO GROUP BY DEPTNO);

Output:

EMPNO
7876
7900
7934

9. Show the name of the department and no of employees who works in that department. Sort in department number.

Query: select d.dname, count(E.EMPNO) FROM EMP E, dept d where E.DEPTNO = d.deptno GROUP BY d.dname, d.deptno ORDER BY d.deptno;

Output:

DNAME	COUNT (E . EMPNO)
ACCOUNTING	3
RESEARCH	5
SALES	6

10. Display the Id, name, salary and the salary grade for any employee who earns the maximum salary for their department. Sort in department number.

Query: SELECT E.EMPNO, E.ENAME, E.SAL, s.grade FROM EMP E, salgrade s WHERE E.SAL IN(SELECT MAX(SAL) FROM EMP GROUP BY DEPTNO) AND E.SAL BETWEEN s.losal AND s.hisal;

Output:

EMPNO	ENAME	SAL	GRADE
7698	BLAKE	2850	4
7839	KING	5000	5
7788	SCOTT	3000	4
7902	FORD	3000	4

11. In which year did most people join the company? Display the year and number of employees.

Query: SELECT TO_CHAR(HIREDATE,'YYYY') AS YEAR, COUNT(EMPNO) AS "NUMBER OF EMPLOYEES" FROM EMP GROUP BY TO_CHAR(HIREDATE,'YYYY') HAVING COUNT(EMPNO)=(SELECT MAX(COUNT(EMPNO)) FROM EMP GROUP BY TO_CHAR(HIREDATE,'YYYY'));

Output:

YEAR	NUMBER OF EMPLOYEES
1981	10

12. Show every alternate row in the employee table.

Query: SELECT EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO, PHONENO, ADDRESS FROM (SELECT EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO, PHONENO, ADDRESS, ROWNUM RN FROM EMP) WHERE MOD(RN,2)=1;

Output:

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	PHONENO	ADDRESS
7369	SMITH	CLERK	7902	17-DEC-80	800	-	20	-	-
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30	-	-
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30	-	-
7782	CLARK	MANAGER	7839	09-JUN-81	2450	-	10	-	-
7839	KING	PRESIDENT	-	17-NOV-81	5000	-	10	-	-
7876	ADAMS	CLERK	7788	23-MAY-87	1100	-	20	-	-
7902	FORD	ANALYST	7566	03-DEC-81	3000	-	20	-	-

13. Display the total salary of all employees. Total salary = salary + commission.

Query: SELECT ENAME, SAL+NVL(COMM,0) AS "TOTAL SALARY" FROM EMP;

Output:

ENAME	TOTAL SALARY
SMITH	800
ALLEN	1900
WARD	1750
JONES	2975
MARTIN	2650
BLAKE	2850
CLARK	2450
SCOTT	3000
KING	5000
TURNER	1500
ADAMS	1100
JAMES	950
FORD	3000
MILLER	1300

14. Display the department name and available jobs in that department.

Query: SELECT DISTINCT D.DNAME AS DEPARTMENT, E.JOB AS "AVAILABLE JOBS"
FROM EMP E, DEPT D WHERE D.DEPTNO = E.DEPTNO ORDER BY DNAME;

Output:

DEPARTMENT	AVAILABLE JOBS
ACCOUNTING	CLERK
ACCOUNTING	MANAGER
ACCOUNTING	PRESIDENT
RESEARCH	ANALYST
RESEARCH	CLERK
RESEARCH	MANAGER
SALES	CLERK
SALES	MANAGER
SALES	SALESMAN

15. Display all the available departments and the employee(s) works under it.

Query: SELECT DISTINCT D.DNAME AS DEPARTMENT, E.* FROM EMP E, DEPT D
WHERE D.DEPTNO = E.DEPTNO;

Output:

DEPARTMENT	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	PHONENO	ADDRESS
ACCOUNTING	7934	MILLER	CLERK	7782	23-JAN-82	1300	-	10	-	-
SALES	7900	JAMES	CLERK	7698	03-DEC-81	950	-	30	-	-
RESEARCH	7369	SMITH	CLERK	7902	17-DEC-80	800	-	20	-	-
SALES	7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30	-	-
ACCOUNTING	7782	CLARK	MANAGER	7839	09-JUN-81	2450	-	10	-	-
ACCOUNTING	7839	KING	PRESIDENT	-	17-NOV-81	5000	-	10	-	-
RESEARCH	7566	JONES	MANAGER	7839	02-APR-81	2975	-	20	-	-
RESEARCH	7788	SCOTT	ANALYST	7566	19-APR-87	3000	-	20	-	-
RESEARCH	7876	ADAMS	CLERK	7788	23-MAY-87	1100	-	20	-	-
RESEARCH	7902	FORD	ANALYST	7566	03-DEC-81	3000	-	20	-	-
SALES	7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30	-	-
SALES	7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30	-	-
SALES	7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0	30	-	-
SALES	7698	BLAKE	MANAGER	7839	01-MAY-81	2850	-	30	-	-