

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, 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,30), LPAD(SAL,30) FROM EMP;

Output:

| RPAD (ENAME , 30) | LPAD (SAL , 30) |
|---------------------|-------------------|
| 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 CONCAT(CONCAT(INITCAP(ENAME),' '),CONCAT(INITCAP(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 employee 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 AS HIRE_DATE,
ADD_MONTHS(HIREDATE,12)
AS SALARY_REVIEW_DATE
FROM EMP ORDER BY SALARY_REVIEW_DATE;**

Output:

| ENAME | HIRE_DATE | 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 * FROM EMP A
WHERE HIREDATE IN (SELECT MAX(HIREDATE)
FROM EMP WHERE A.DEPTNO = DEPTNO);**

Output:

| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO | PHONENO | ADDRESS |
|-------|--------|-------|------|-----------|------|------|--------|---------|---------|
| 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 | - | - |

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.DEPTNO, D.DNAME
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
ORDER BY E.DEPTNO;
```

Output:

| EMPNO | ENAME | SAL | GRADE |
|-------|-------|------|-------|
| 7839 | KING | 5000 | 5 |
| 7902 | FORD | 3000 | 4 |
| 7788 | SCOTT | 3000 | 4 |
| 7698 | BLAKE | 2850 | 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 NO_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 | NO_OF_EMPLOYEES |
|------|-----------------|
| 1981 | 10 |

12.Show the every alternate row in 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 EMPNO,ENAME, SAL+NVL(COMM,0) AS TOTAL_SALARY FROM EMP;

Output:

| EMPNO | ENAME | TOTAL_SALARY |
|-------|--------|--------------|
| 7369 | SMITH | 800 |
| 7499 | ALLEN | 1900 |
| 7521 | WARD | 1750 |
| 7566 | JONES | 2975 |
| 7654 | MARTIN | 2650 |
| 7698 | BLAKE | 2850 |
| 7782 | CLARK | 2450 |
| 7788 | SCOTT | 3000 |
| 7839 | KING | 5000 |
| 7844 | TURNER | 1500 |
| 7876 | ADAMS | 1100 |
| 7900 | JAMES | 950 |
| 7902 | FORD | 3000 |
| 7934 | 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 | - | - |