

# Assignment 2

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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

```
SELECT ENAME, MGR AS MANAGER_ID,  
TO_CHAR(HIREDATE,INITCAP('FMDDSPTH MONTH, YYYY')) AS DATE_HIRED  
FROM EMP WHERE JOB='CLERK' OR DEPTNO=20;
```

```
SELECT ENAME, MGR AS MANAGER_ID, TO_CHAR(HIREDATE,INITCAP('FMDDSPTH MONTH, YYYY')) AS DATE_HIRED FROM EMP WHERE JOB='CLERK' OR DEPTNO=20
```

ENAME	MANAGER_ID	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.

```
SELECT ENAME,SAL AS OLDSALARY, ROUND(1.25*SAL) AS NEWSALARY  
FROM EMP;
```

---

```
SELECT ENAME,SAL AS OLDSALARY, ROUND(1.25*SAL) AS NEWSALARY FROM EMP
```

ENAME	OLDSALARY	NEWSALARY
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.

SELECT RPAD(ENAME,20,' ') AS NAME, LPAD(SAL,20,' ') AS SAL FROM EMP;

```
SELECT RPAD(ENAME,20,' ') AS NAME, LPAD(SAL,20,' ') AS SAL FROM EMP
```

NAME	SAL
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.

```
SELECT CONCAT(CONCAT(INITCAP(ENAME),'('),CONCAT(INITCAP(JOB),')) AS  
ROLE_OF_THE_EMPLOYEE FROM EMP
```

---

```
SELECT CONCAT(CONCAT(INITCAP(ENAME),'('),CONCAT(INITCAP(JOB),')) AS ROLE_OF_THE_EMPLOYEE FROM EMP
```

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)

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

```
SELECT * FROM EMP WHERE JOB='CLERK';
```

```
SELECT * FROM EMP WHERE JOB='CLERK'
```

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	-	-

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4 rows selected.

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.

```
SELECT ENAME, HIREDATE, HIREDATE+365 AS REVIEW_DATE FROM EMP  
ORDER BY REVIEW_DATE ASC;
```

SELECT ENAME, HIREDATE,HIREDATE+365 AS REVIEW\_DATE FROM EMP ORDER BY REVIEW\_DATE ASC

ENAME	HIREDATE	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	18-APR-88
ADAMS	23-MAY-87	22-MAY-88

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14 rows selected.

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

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

SELECT \* FROM EMP WHERE SAL IN (SELECT MAX(SAL) FROM EMP GROUP BY JOB) ORDER BY SAL DESC

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	-	-

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6 rows selected.

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

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

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

EMPNO
7876
7900
7934

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3 rows selected.

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

```
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;
```

```
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
```

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

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3 rows selected.

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.

```
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;
```

```
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
```

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

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4 rows selected.

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

```
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'));
```



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'))

YEAR	NO_OF_EMPLOYEES
1981	10

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12. Show the every alternate row in employee table.

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;

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;

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	-	-

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7 rows selected.

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

SELECT EMPNO, ENAME, SAL+NVL(COMM,0) AS TOTAL\_SALARY FROM EMP;

```
SELECT EMPNO,ENAME, SAL+NVL(COMM,0) AS TOTAL_SALARY FROM EMP
```

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

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14 rows selected.

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

```
SELECT DISTINCT D.DNAME AS DEPARTMENT, E.JOB AS  
AVAILABLE_JOBS FROM EMP E, DEPT D WHERE D.DEPTNO =  
E.DEPTNO ORDER BY DNAME;
```

DEPARTMENT	AVAILABLE_JOBS
ACCOUNTING	CLERK
ACCOUNTING	MANAGER
ACCOUNTING	PRESIDENT
RESEARCH	ANALYST
RESEARCH	CLERK
RESEARCH	MANAGER
SALES	CLERK
SALES	MANAGER
SALES	SALESMAN

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9 rows selected.

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

```
SELECT D.DNAME, LISTAGG(E.ENAME,',') WITHIN GROUP (ORDER BY  
E.ENAME) AS EMPLOYEES FROM (SELECT DISTINCT ENAME,  
DEPTNO FROM EMP) E JOIN DEPT D ON D.DEPTNO= E.DEPTNO  
GROUP BY D.DNAME ORDER BY D.DNAME;
```

DNAME	EMPLOYEES
ACCOUNTING	CLARK, KING, MILLER
RESEARCH	ADAMS, FORD, JONES, SCOTT, SMITH
SALES	ALLEN, BLAKE, JAMES, MARTIN, TURNER, WARD

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