

SOUGATA SAHA

IT-A2-037 DBMS ASSIGNMENT 2

ASSGNMENT 2

Q1. 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

Ans: SELECT HIREDATE ,INITCAP(TO_CHAR(HIREDATE,'FMDDSPTH MONTH, YYYY')) AS "DATE HIRED "
FROM EMPLOYEE

WHERE DEPTNO =20;

HIREDATE	DATE HIRED
17-DEC-80	Seventeenth December, 1980
02-APR-81	Second April, 1981
19-APR-87	Nineteenth April, 1987
23-MAY-87	Twenty-Third May, 1987
03-DEC-81	Third December, 1981

Q2. List the employee name and old salary and new increased salary by 25% and expressed as a whole number.

Ans: SELECT SAL AS "OLD SALARY" ,ROUND(SAL*1.25,2) AS "NEW SALARY" FROM EMPLOYEE;

OLD SALARY	NEW SALARY
1600	2000
1250	1563
2975	3719
1250	1563
2850	3563
2450	3063
3000	3750
5000	6250
1500	1875

Q3. List the employee name and salary where name is displayed as left justified and salary with right justified.

Ans: SELECT LPAD(NAME,10) "EMPLOYEE NAME" , RPAD (SAL,10) AS SALARY FROM EMPLOYEE;

EMPLOYEE NAME	SALARY
SMITH	800
ALLEN	1600
WARD	1250
JONES	2975
MARTIN	1250
BLAKE	2850
CLARK	2450
SCOTT	3000
KING	5000
TURNER	1500
ADAMS	1100

Q4. 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.

Ans: SELECT INITCAP(NAME || '(<' || JOB || '>') AS "EMPLOYEE INFO " FROM EMPLOYEE;

EMPLOYEE INFO
Smith(<Clerk>)
Allen(<Salesman>)
Ward(<Salesman>)
Jones(<Manager>)
Martin(<Salesman>)
Blake(<Manager>)
Clark(<Manager>)
Scott(<Analyst>)
King(<President>)
Turner(<Salesman>)
Adams(<Clerk>)

Q5. Give the details of an employees with job is clerk (enter the job value clerk as input).

Ans:

SELECT * FROM EMPLOYEE

WHERE JOB='CLERK';

ID	NAME	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	-	-

Q6. 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.

Ans: SELECT HIREDATE , HIREDATE+INTERVAL '1' YEAR AS "REVIEW DATE" FROM EMPLOYEE
ORDER BY HIREDATE;;

HIREDATE	REVIEW DATE
17-DEC-80	17-DEC-81
20-FEB-81	20-FEB-82
22-FEB-81	22-FEB-82
02-APR-81	02-APR-82
01-MAY-81	01-MAY-82
09-JUN-81	09-JUN-82
08-SEP-81	08-SEP-82
28-SEP-81	28-SEP-82
17-NOV-81	17-NOV-82
03-DEC-81	03-DEC-82
03-DEC-81	03-DEC-82

Q7. Find the employees(s) who earn the highest salary in each job type sort in descending salary order(Use IN operator and subqueries)

Ans: SELECT * FROM EMPLOYEE

WHERE SAL IN (SELECT MAX(SAL) FROM EMPLOYEE GROUP BY JOB)

ORDER BY SAL DESC;

ID	NAME	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	-	-

Q8. Find the most recently hired employee in each department (give number only).

Ans: SELECT * FROM EMPLOYEE E

WHERE HIREDATE IN (SELECT MAX(HIREDATE) FROM EMPLOYEE WHERE E.DEPTNO=DEPTNO);

ID	NAME	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	-	-

Q9. Show the name of the department and no of employees who works in that department.

Sort in department number.

Ans: SELECT DNAME AS "DEPERTMENT NAME",COUNT(NAME) AS "EMPLOYEE COUNT" FROM EMPLOYEE LEFT JOIN DEPT

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ON EMPLOYEE.DEPTNO=DEPT.DEPTNO
GROUP BY DEPT.DNAME,DEPT.DEPTNO
ORDER BY DEPT.DEPTNO;

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DEPERTMENT NAME	EMPLOYEE COUNT
ACCOUNTING	3
RESEARCH	5
SALES	6

Q10. Display the Id, name, salary and the salary grade for any employee who earns the maximum salary for their department. Sort in department number.

Ans: SELECT ID , NAME ,SAL , GRADE FROM EMPLOYEE

LEFT JOIN SALGRADE

ON EMPLOYEE.SAL BETWEEN SALGRADE.LOSAL AND SALGRADE.HISAL

WHERE SAL =(SELECT MAX(SAL) FROM EMPLOYEE E WHERE EMPLOYEE.DEPTNO=E.DEPTNO)

ORDER BY EMPLOYEE.DEPTNO ;

ID	NAME	SAL	GRADE
7839	KING	5000	5
7902	FORD	3000	4
7788	SCOTT	3000	4
7698	BLAKE	2850	4

Q11. In which year did most people join the company? Display the year and number of employees.

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Ans: SELECT TO_CHAR(HIREDATE, 'YYYY') AS YEAR,  
COUNT(id) AS NO_OF_EMPLOYEES  
FROM EMPLOYEE GROUP BY TO_CHAR(HIREDATE, 'YYYY')  
HAVING COUNT(ID)=(SELECT MAX(COUNT(ID))  
FROM EMPLOYEE  
GROUP BY TO_CHAR(HIREDATE, 'YYYY'));
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YEAR	NO_OF_EMPLOYEES
1981	10

Q12. Show the every alternate row in employee table.

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Ans: SELECT *  
FROM (  
    SELECT  
        EMPLOYEE.*,  
        ROW_NUMBER() OVER (ORDER BY ID) AS RN  
    FROM EMPLOYEE  
)  
WHERE MOD(RN, 2) = 1;
```


ID	NAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	PHONENO	ADDRESS	RN
7369	SMITH	CLERK	7902	17-DEC-80	800	-	20	-	-	1
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30	-	-	3
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30	-	-	5
7782	CLARK	MANAGER	7839	09-JUN-81	2450	-	10	-	-	7
7839	KING	PRESIDENT	-	17-NOV-81	5000	-	10	-	-	9
7876	ADAMS	CLERK	7788	23-MAY-87	1100	-	20	-	-	11
7902	FORD	ANALYST	7566	03-DEC-81	3000	-	20	-	-	13

Q13. Display the total salary of all employees. Total salary = salary + commission.

Ans: SELECT ID ,NAME ,SAL+NVL(COMM,0) AS TOTAL_SALARY

FROM EMPLOYEE ;

ID	NAME	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

Q14. Display the department name and available jobs in that department.

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Ans: SELECT DEPT.DNAME,EMPLOYEE.JOB  
FROM DEPT  
RIGHT JOIN EMPLOYEE  
ON EMPLOYEE.DEPTNO=DEPT.DEPTNO  
GROUP BY DEPT.DNAME,EMPLOYEE.JOB,DEPT.DEPTNO  
ORDER BY DEPT.DEPTNO;
```

DNAME	JOB
ACCOUNTING	CLERK
ACCOUNTING	MANAGER
ACCOUNTING	PRESIDENT
RESEARCH	ANALYST
RESEARCH	CLERK
RESEARCH	MANAGER
SALES	CLERK
SALES	MANAGER
SALES	SALESMAN

Q15. Display all the available departments and the employee(s) works under it.

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Ans: SELECT * FROM DEPT RIGHT JOIN EMPLOYEE  
ON EMPLOYEE.DEPTNO=DEPT.DEPTNO  
ORDER BY DEPT.DEPTNO;
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[illegible]