1. WRITE A SQL STATEMENT TO DISPLAY THE LOWEST PAID EMPLOYEE'S (NAME , SALARY , DEPARTMENT NAME)

Select E.NAME,E.SALARY,D.NAME from EMP E JOIN DEPT D ON E.DEPT\_NO = D.ID where E.SALARY=(Select MIN(SALARY) from EMP);

|  |  |  |
| --- | --- | --- |
| **ENAME** | **SAL** | **DNAME** |
| **SMITH** | 800 | RESEARCH |

1. LIST MINIMUM SALARY FOR EACH DEPARTMENT

Select E.SALARY,E.DEPT\_NO from EMP E where SALARY IN (Select MIN(SALARY) from EMP where E.DEPT\_NO=DEPT\_NO);

|  |  |
| --- | --- |
| **DEPTNO** | **MIN(SAL)** |
| **10** | 1300 |
| **20** | 800 |
| **30** | 950 |

1. WRITE A QUERY BASED ON FOLLOWING RESULT.

Select E.ID,E.NAME,E.ROLE,E.SALARY,E.DEPT\_NO,D.NAME from EMP E JOIN DEPT D ON E.DEPT\_NO = D.ID where E.ROLE='Clerk';

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **EMPNO** | **ENAME** | **JOB** | **SAL** | **DEPTNO** | **DNAME** |
| **7369** | SMITH | CLERK | 800 | 20 | RESEARCH |
| **7900** | JAMES | CLERK | 950 | 30 | SALES |
| **7934** | MILLER | CLERK | 1300 | 10 | ACCOUNTING |

1. LIST ALL THE EMPLOYEES WHO ARE WORKING IN FORD’S DEPARTMENT.

Select \* from EMP where DEPT\_NO IN (Select ID from DEPT where NAME=’FORD’);

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **EMPNO** | **ENAME** | **JOB** | **MGR** | **HIREDATE** | **SAL** | **DEPTNO** |
| **7369** | SMITH | CLERK | 7902 | 17-Dec-00 | 800 | 20 |
| **7566** | JONES | MANAGER | 7839 | 02-Apr-01 | 2975 | 20 |
| **7788** | SCOTT | ANALYST | 7566 | 19-Apr-07 | 3000 | 20 |
| **7876** | ADAMS | CLERK | 7788 | 23-May-07 | 1100 | 20 |
| **7902** | FORD | ANALYST | 7566 | 03-Dec-01 | 3000 | 20 |

1. LIST ALL EMPLOYEE WHO ARE WORKING IN WARD'S DEPARTMENT AND

EARNING MORE THEN MARTIN

Select \* from EMP E JOIN DEPT D ON E.DEPT\_NO=D.ID where D.NAME=’WARD’ AND E.SALARY>(Select SALARY from EMP where NAME=’MARTIN’);

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **EMPNO** | **ENAME** | **JOB** | **MGR** | **HIREDATE** | **SAL** | **DEPTNO** |
| **7369** | SMITH | CLERK | 7902 | 17-Dec-00 | 800 | 20 |
| **7566** | JONES | MANAGER | 7839 | 02-Apr-01 | 2975 | 20 |
| **7788** | SCOTT | ANALYST | 7566 | 19-Apr-07 | 3000 | 20 |

1. DISPLAY EMPLOYEE NUMBER, NAME,DEPT NUMBER, DEPT NAME, AND LOCATION

Select E.ID,E.NAME,D.ID,D.NAME,D.LOC from EMP E JOIN DEPT D ON E.DEPT\_NO=D.ID;

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **EMPNO** | **ENAME** | **DEPTNO** | **DNAME** | **LOC** |
| **7369** | SMITH | 20 | RESEARCH | DALLAS |
| **7499** | ALLEN | 30 | SALES | CHICAGO |
| **7521** | WARD | 30 | SALES | CHICAGO |
| **7566** | JONES | 20 | RESEARCH | DALLAS |
| **7654** | MARTIN | 30 | SALES | CHICAGO |
| **7698** | BLAKE | 30 | SALES | CHICAGO |
| **7782** | CLARK | 10 | ACCOUNTING | NEW YORK |
| **7788** | SCOTT | 20 | RESEARCH | DALLAS |
| **7839** | KING | 10 | ACCOUNTING | NEW YORK |
| **7844** | TURNER | 30 | SALES | CHICAGO |
| **7876** | ADAMS | 20 | RESEARCH | DALLAS |
| **7900** | JAMES | 30 | SALES | CHICAGO |
| **7902** | FORD | 20 | RESEARCH | DALLAS |
| **7934** | MILLER | 10 | ACCOUNTING | NEW YORK |

1. DISPLAY THE FOLLOWING RESULT WHERE DATA IS SORTED BY DEPTNO.

Select D.ID,D.NAME,E.NAME from EMP E JOIN DEPT D ON E.DEPT\_NO=D.ID order by D.ID;

|  |  |  |
| --- | --- | --- |
| **DEPTNO** | **DNAME** | **ENAME** |
| **10** | ACCOUNTING | CLARK |
| **10** | ACCOUNTING | KING |
| **10** | ACCOUNTING | MILLER |
| **20** | RESEARCH | JONES |
| **20** | RESEARCH | FORD |
| **20** | RESEARCH | ADAMS |
| **20** | RESEARCH | SMITH |
| **20** | RESEARCH | SCOTT |
| **30** | SALES | WARD |
| **30** | SALES | TURNER |
| **30** | SALES | ALLEN |
| **30** | SALES | JAMES |
| **30** | SALES | BLAKE |
| **30** | SALES | MARTIN |

1. LIST ALL THE EMPLOYEE WHO ARE WORKING IN NEW YORK

Select E.NAME,D.ID,D.NAME,D.LOC from EMP E JOIN DEPT D ON E.DEPT\_NO=D.ID where D.LOC=’NEWYORK’;

|  |  |  |  |
| --- | --- | --- | --- |
| **ENAME** | **DEPTNO** | **DNAME** | **LOC** |
| **CLARK** | 10 | ACCOUNTING | NEW YORK |
| **KING** | 10 | ACCOUNTING | NEW YORK |
| **MILLER** | 10 | ACCOUNTING | NEW YORK |

1. WRITE A SQL STATEMENT TO DISPLAY THE LOWEST PAID EMPLOYEE'S (NAME , SALARY , DEPARTMENT NAME) IN THE RESPECTIVE DEPARTMENT.

Select E.NAME,E.SALARY,D.NAME from EMP E JOIN DEPT D ON E.DEPT\_NO=D.ID where E.SALARY IN (Select MIN(SALARY) from EMP where D.ID=DEPT\_NO);

|  |  |  |
| --- | --- | --- |
| **ENAME** | **MIN(SAL)** | **DNAME** |
| **SMITH** | 800 | RESEARCH |
| **JAMES** | 950 | SALES |
| **MILLER** | 1300 | ACCOUNTING |

1. WRITE A SQL STATEMENT TO DISPLAY THE HIGHEST PAID EMPLOYEE'S (NAME, JOB, MANAGER NAME, SALARY AND DEPARTMENT NAME AND DEPARTMENT NO.) IN THE RESPECTIVE DEPARTMENT.

Select E.NAME,E.ROLE,T.NAME,E.SALARY,D.NAME

from DEPT D,EMP T RIGHT OUTER JOIN EMP E ON T.ID=E.MANAGER\_ID

where E.DEPT\_NO=D.ID

AND E.SALARY IN (Select MAX(SALARY) from EMP where D.ID=DEPT\_NO);

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **EMPNO** | **JOB** | **MGR** | **MAX(SAL)** | **DNAME** |
| **7698** | MANAGER | 7839 | 2850 | SALES |
| **7788** | ANALYST | 7566 | 3000 | RESEARCH |
| **7839** | PRESIDENT |  | 5000 | ACCOUNTING |
| **7902** | ANALYST | 7566 | 3000 | RESEARCH |

1. WRITE A SQL STATEMENT TO DISPLAY THE EMPLOYEE NAME (BOSS) AND NUMBER OF EMPLOYEE (SUBORDINATES) DIRECTLY REPORTING TO HIM?

Select E.NAME,COUNT(T.MANAGER\_ID) from EMP E JOIN EMP T ON T.MANAGER\_ID=E.ID GROUP BY E.NAME;

|  |  |
| --- | --- |
| **BOSS** | **SUBORDINATES** |
| **JONES** | 2 |
| **FORD** | 1 |
| **CLARK** | 1 |
| **SCOTT** | 1 |
| **BLAKE** | 5 |
| **KING** | 3 |

1. DISPLAY THE NAMES, DESIGNATION AND SALARIES OF ALL EMPLOYEES WHO HAVE MANAGER ALONG WITH MANAGER'S NAME, DESIGNATION AND MANAGER'S SALARY.

(SELF-JOIN)

Select E.NAME,E.ROLE,E.SALARY,T.NAME,T.ROLE,T.SALARY from EMP E JOIN EMP T ON E.MANAGER\_ID=T.ID;

1. Create the following tables:

ORDER: {Id, OrderDate, OrderNumber}

ORDER\_ITEM: {Id, OrderId, ProductId, UnitPrice, Quantity}

PRODUCT: {Id, ProductName}

Write a query to display the following output sorted by order no:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ORDER\_NO** | **ORDER\_DATE** | **PRODUCT\_NAME** | **QUANTITY** | **UNIT\_PRICE** |
| **7369** | 7/4/2012 12:00:00 AM | EASY-TRADING | 800 | 20 |
| **7900** | 2/10/2011 12:00:00 AM | BANK-ANYWHERE | 950 | 30 |
| **7934** | 9/23/2015 12:00:00 AM | TRIP-MANAGER | 1300 | 10 |

Select O.ID,O.ORDERDATE,P.PRODUCTNAME,I.QUANTITY,I.UNIT\_PRICE from ORDER O,ORDER\_ITEM I,PRODUCT P where O.ID=I.ORDERID AND I.PRODUCTID=P.ID ORDER BY O.ID;

1. Find the 2nd minimum salary of the employee.

Select MAX(E.SALARY) from EMP E where E.SALARY NOT IN (Select MAX(SALARY) from EMP);

1. Find the max 3 salaries from employee table.

Select MAX(E.SALARY),MAX(T.SALARY),MAX(M.SALARY) from EMP E,EMP T,EMP M where NOT T.SALARY=(Select MAX(SALARY)from EMP) AND M.SALARY<T.SALARY;

1. Display common records from emp\_1 & emp\_2 tables. (Use INTERSECT)

(Select \* from EMP\_1 ) INTERSECT (Select \* from EMP\_2);

1. Display department no wise total salary where more than 2 employees exist in a department.

Select SUM(SALARY) from EMP GROUP BY DEPT\_NO HAVING COUNT(DEPT\_NO)>2;