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

**FROM EMP E INNER JOIN DEPT ON E.DEPT\_NO = DEPT.ID**

**WHERE E.SALARY = (SELECT MIN(SALARY) FROM EMP);**

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

1. LIST MINIMUM SALARY FOR EACH DEPARTMENT  
   **SELECT E.DEPT\_NO, E.SALARY FROM EMP E**

**WHERE E.SALARY = (SELECT MIN(E2.SALARY) FROM EMP E2 WHERE E.DEPT\_NO = E2.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 INNER JOIN DEPT D ON E.DEPT\_NO = D.ID;**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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 E.ID, E.NAME, E.ROLE, E.MANAGER\_ID, E.HIRED\_DATE, E.SALARY, E.DEPT\_NO FROM EMP E WHERE E.DEPT\_NO =**

**(SELECT E2.DEPT\_NO FROM EMP E2 WHERE E2.NAME = 'Steve');**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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 E.ID, E.NAME, E.ROLE, E.MANAGER\_ID, E.HIRED\_DATE, E.SALARY, E.DEPT\_NO FROM EMP E**

**WHERE E.DEPT\_NO =**

**(SELECT E2.DEPT\_NO FROM EMP E2 WHERE E2.NAME = 'Steve')**

**AND E.SALARY > (SELECT E3.SALARY FROM EMP E3 WHERE E3.NAME='Bill');**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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, E.DEPT\_NO, D.NAME, D.LOC FROM EMP E INNER 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 E.DEPT\_NO, D.NAME, E.NAME FROM EMP E INNER JOIN**

**DEPT D ON E.DEPT\_NO = D.ID ORDER BY E.DEPT\_NO;**

|  |  |  |
| --- | --- | --- |
| **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, E.DEPT\_NO, D.NAME, D.LOC FROM EMP E INNER JOIN**

**DEPT D ON E.DEPT\_NO = D.ID WHERE D.LOC = 'NEW YORK';**

|  |  |  |  |
| --- | --- | --- | --- |
| **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.DEPT\_NO, E.SALARY, D.NAME FROM EMP E**

**INNER JOIN DEPT D ON E.DEPT\_NO = D.ID**

**WHERE E.SALARY = (SELECT MIN(E2.SALARY) FROM EMP E2 WHERE E.DEPT\_NO = E2.DEPT\_NO)**

**ORDER BY E.SALARY;**

|  |  |  |
| --- | --- | --- |
| **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.ID, E.ROLE, E.MANAGER\_ID, E.SALARY, D.NAME FROM EMP E**

**INNER JOIN DEPT D ON E.DEPT\_NO = D.ID**

**WHERE E.SALARY = (SELECT MAX(E2.SALARY) FROM EMP E2 WHERE E.DEPT\_NO = E2.DEPT\_NO) ORDER BY E.SALARY DESC;**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **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 BOSS, (SELECT COUNT(\*) FROM EMP E3 WHERE E3.MANAGER\_ID = E.ID) SUBORDINATES FROM EMP E WHERE E.ID IN (SELECT E2.MANAGER\_ID FROM EMP E2 WHERE E.ID = E2.MANAGER\_ID);**

|  |  |
| --- | --- |
| **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, M.NAME Manager, M.ROLE Designation, M.SALARY FROM EMP E JOIN EMP M ON E.MANAGER\_ID = M.MANAGER\_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:  
**SELECT O.ORDER\_NUMBER, O.ORDER\_DATE, P.NAME, OI.QUANTITY, OI.UNIT\_PRICE FROM ORD O INNER JOIN ORDER\_ITEM OI ON O.ORDER\_NUMBER = OI.ORDER\_ID INNER JOIN PRODUCT P ON OI.PRODUCT\_ID = P.ID;**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **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 |

1. Find the 2nd minimum salary of the employee.  
   **SELECT MIN(SALARY) FROM EMP WHERE SALARY > (SELECT MIN(SALARY) FROM EMP);**
2. Find the max 3 salaries from employee table.  
   **SELECT SALARY FROM (SELECT SALARY FROM EMP ORDER BY SALARY DESC) WHERE ROWNUM <= 3;**
3. Display common records from emp\_1 & emp\_2 tables. (Use INTERSECT)  
   **SELECT \* FROM EMP INTERSECT SELECT \* FROM EMP1;**
4. Display department no wise total salary where more than 2 employees exist in a department.  
   **SELECT DISTINCT E.DEPT\_NO, (SELECT SUM(E2.SALARY) FROM EMP E2 WHERE E2.DEPT\_NO = E.DEPT\_NO AND (SELECT COUNT(\*) FROM EMP E3 WHERE E3.DEPT\_NO = E.DEPT\_NO) > 2) Salary FROM EMP E ORDER BY E.DEPT\_NO;**