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

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

SELECT E.NAME, E.SALARY, D.NAME "Department" FROM

(SELECT DEPT\_NO, NAME, SALARY FROM EMP WHERE SALARY = (SELECT MIN(SALARY) FROM EMP)) E JOIN DEPT D ON E.DEPT\_NO = D.ID;

1. LIST MINIMUM SALARY FOR EACH DEPARTMENT

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

SELECT DEPT\_NO, MIN(Salary) FROM EMP GROUP BY DEPT\_NO;

1. WRITE A QUERY BASED ON FOLLOWING RESULT.

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

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;

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

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

SELECT \* FROM EMP WHERE DEPT\_NO = (SELECT ID FROM DEPT WHERE NAME LIKE '%Ford%');

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

EARNING MORE THEN 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 |

SELECT \* FROM (SELECT \* FROM EMP WHERE DEPT\_NO = (SELECT ID FROM DEPT WHERE NAME LIKE '%Ward%')) WHERE SALARY > (SELECT SALARY FROM EMP WHERE NAME LIKE '%Martin%')

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

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

SELECT E.ID, E.NAME, D.ID, D.NAME, D.LOCATION FROM EMP E JOIN DEPT D ON E.DEPT\_NO = D.ID;

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

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

SELECT D.ID, D.NAME, E.NAME FROM DEPT D JOIN EMP E ON D.ID = E.DEPT\_NO ORDER BY D.ID DESC;

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

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

SELECT ENAME, D\_NO, D\_NAME, LOCATION FROM

(SELECT E.NAME ENAME, D.ID D\_NO, D.NAME D\_NAME, D.LOCATION LOCATION FROM EMP E JOIN DEPT D ON E.DEPT\_NO = D.ID)

WHERE LOCATION LIKE '%NEW YORK%';

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

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

SELECT DEPT\_NO, MIN\_SALARY, D.NAME FROM

(SELECT E.DEPT\_NO DEPT\_NO, MIN(E.SALARY) MIN\_SALARY FROM EMP E GROUP BY E.DEPT\_NO) TE JOIN DEPT D ON TE.DEPT\_NO = D.ID;

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.

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

SELECT X.ENAME, X.MAX\_SALARY, X.DEPT\_NO, D.NAME DEPT\_NAME FROM

(SELECT E.NAME ENAME , T.MAX\_SALARY MAX\_SALARY, T.DEPT\_NO DEPT\_NO FROM

(SELECT MAX(SALARY) MAX\_SALARY, DEPT\_NO FROM EMP GROUP BY DEPT\_NO) T JOIN EMP E ON T.MAX\_SALARY = E.SALARY) X JOIN DEPT D ON X.DEPT\_NO = D.ID;

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

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

SELECT B.NAME, COUNT(\*)

FROM EMP E

JOIN EMP B ON B.ID = E.MANAGER\_ID

GROUP BY B.ID, B.NAME;

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 M.NAME NAME, M.ROLE ROLE, M.SALARY SALARY, E.NAME MANAGER\_NAME, E.SALARY MANAGER\_SALARY, E.ROLE MANAGER\_ROLE FROM EMP E JOIN EMP M ON E.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:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **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 Z.ORDER\_NO ORDER\_NO, Z.ORDER\_DATE, P.PRODUCT\_NAME, Z.QUANTITY, Z.UNTI\_PRICE FROM

(SELECT X.ID ORDER\_NO, X.ORDER\_DATE ORDER\_DATE, Y.QUANTITY QUANTITY, Y.UNIT\_PRICE, Y.PRODUCT\_ID

FROM ORDERS X JOIN ORDER\_ITEM Y ON X.ID = Y.ORDER\_ID) Z JOIN PRODUCT P ON Z.PRODUCT\_ID = P.ID;

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

SELECT \* FROM (

SELECT E.\*, ROW\_NUMBER() OVER (ORDER BY SALARY) RN FROM EMP E

) WHERE RN = 2;

1. Find the max 3 salaries from employee table.

SELECT \* FROM (SELECT SALARY FROM EMP ORDER BY SALARY DESC) WHERE ROWNUM <= 3;

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 WHERE EMP.DEPT\_NO IN (SELECT D.ID FROM DEPT D WHERE

(SELECT COUNT(\*) FROM EMP E WHERE E.DEPT\_NO = D.ID) > 2 GROUP BY D.ID, D.NAME) GROUP BY DEPT\_NO;