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

SELECT E.ENAME,E.SAL,D.DNAME

FROM EMP E JOIN DEPT D

ON E.DEPTNO = D.DEPTNO

WHERE E.SAL =(SELECT MIN(SAL)

FROM EMP );

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

1. LIST MINIMUM SALARY FOR EACH DEPARTMENT

SELECT D.DEPTNO, MIN(E.SAL)

FROM EMP E JOIN DEPT D

ON E.DEPTNO = D.DEPTNO

GROUP BY D.DEPTNO

ORDER BY D.DEPTNO;

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

1. WRITE A QUERY BASED ON FOLLOWING RESULT.

SELECT DISTINCT D.DEPTNO,E.EMPNO,E.ENAME,E.JOB,E.SAL,D.DNAME

FROM EMP E JOIN DEPT D

ON E.DEPTNO = D.DEPTNO

WHERE E.JOB = ‘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 E.\*,D.DNAME

FROM EMP E JOIN DEPT D

ON E.DEPTNO = D.DEPTNO

WHERE D.DEPTNO = (SELECT DEPTNO

FROM EMP

WHERE ENAME = '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 E.\*,D.DNAME

FROM EMP E JOIN DEPT D

ON E.DEPTNO = D.DEPTNO

WHERE (D.DEPTNO = (SELECT DEPTNO

FROM EMP

WHERE ENAME = 'WARD')) AND

(E.SAL > (SELECT SAL

FROM EMP

WHERE ENAME = '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.EMPNO,E.ENAME,E.DEPTNO,D.DNAME,D.LOC

FROM EMP E JOIN DEPT D

ON E.DEPTNO = D.DEPTNO;

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

SELECT E.DEPTNO,D.DNAME,E.ENAME

FROM EMP E JOIN DEPT D

ON E.DEPTNO = D.DEPTNO

ORDER BY E.DEPTNO;

|  |  |  |
| --- | --- | --- |
| **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.ENAME,E.DEPTNO,D.DNAME,D.LOC

FROM EMP E JOIN DEPT D

ON E.DEPTNO = D.DEPTNO

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.ENAME,E.SAL,D.DNAME

FROM EMP E JOIN DEPT D

ON E.DEPTNO = D.DEPTNO

WHERE E.SAL IN (SELECT MIN(SAL) FROM EMP GROUP BY DEPTNO)

ORDER BY E.SAL;

|  |  |  |
| --- | --- | --- |
| **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.EMPNO,E.JOB,E.MGR, E.ENAME,E.SAL "MAX(SAL)",D.DNAME

FROM EMP E JOIN DEPT D

ON E.DEPTNO = D.DEPTNO

WHERE E.SAL IN (SELECT MAX(SAL) FROM EMP GROUP BY DEPTNO)

ORDER BY E.EMPNO;

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **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.ENAME "BOSS", COUNT(\*) "SUBORDINATES"

FROM EMP E JOIN EMP D

ON E.EMPNO = D.MGR

GROUP BY E.EMPNO,E.ENAME;

|  |  |
| --- | --- |
| **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 distinct e.Ename as Employee, m.MGR as reports\_to

from EMP e

join Emp m on e.mgr = m.mgr;

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:

CREATE TABLE ORDER\_TABLE(

ID NUMERIC(2) CONSTRAINT ID\_ORDER\_PK PRIMARY KEY,

ORDERDATE DATE,

ORDERNUMBER NUMERIC(4)

);

CREATE TABLE ORDER\_ITEM(

ID NUMERIC(2) CONSTRAINT ID\_ORDER\_ITEM\_PK PRIMARY KEY,

ORDERID NUMERIC(4) CONSTRAINT ORDERID\_ORDER\_ITEM\_FK REFERENCES ORDER\_TABLE(ID),

PRODUCTID NUMERIC(4) CONSTRAINT PRODUCTID\_ORDER\_ITEM\_FK REFERENCES PRODUCT(ID),

UNITPRICE NUMERIC(4),

QUANTITY NUMERIC(4)

);

CREATE TABLE PRODUCT(

ID NUMERIC(2) CONSTRAINT ID\_PRODUCT\_PK PRIMARY KEY,

PRODUCTNAME VARCHAR(30)

);

INSERT INTO ORDER\_ITEM VALUES (3, 2, 4,30, 950);

INSERT INTO ORDER\_ITEM VALUES (5, 3, 6,10, 1300);

INSERT INTO ORDER\_ITEM VALUES (1, 2, 2,20, 800);

INSERT INTO ORDER\_TABLE VALUES (2, '10-2-11', 7900);

INSERT INTO ORDER\_TABLE VALUES (3, '23-9-15', 7934);

INSERT INTO PRODUCT VALUES (2, 'EASY-TRADING');

INSERT INTO PRODUCT VALUES (4, 'BANK-ANYWHERE');

INSERT INTO PRODUCT VALUES (6, 'TRIP-MANAGER');

SELECT O.ORDERNUMBER,O.ORDERDATE,P.PRODUCTNAME,O1.QUANTITY,O1.UNITPRICE

FROM ORDER\_TABLE O JOIN ORDER\_ITEM O1

ON O.ID = O1.ID

JOIN PRODUCT P

ON P.ID = O1.PRODUCTID

ORDER BY O1.ORDERID;

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **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(sal) "2ND MIN SAL"

from emp

where sal<>(select MIN(sal) from emp);

1. Find the max 3 salaries from employee table.

SELECT \* FROM

(

SELECT \*FROM emp

ORDER BY SAL desc

)

WHERE rownum <= 3

ORDER BY SAL ;

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 DEPTNO,SUM(SAL) AS TOTAL

FROM EMP

GROUP BY DEPTNO

HAVING COUNT(EMPNO)>=2;