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

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

SQL> SELECT DISTINCT EMP.ENAME, EMP.SAL, DEPT.DNAME FROM EMP, DEPT

2 WHERE EMP.DEPTNO = DEPT.DEPTNO AND

3 SAL IN (SELECT MIN(SAL) FROM EMP);

ENAME SAL DNAME

---------- ---------- --------------

SMITH 800 RESEARCH

2) LIST MINIMUM SALARY FOR EACH DEPARTMENT

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

SQL> SELECT DISTINCT DEPT.DEPTNO, MIN(EMP.SAL) FROM EMP, DEPT

2 WHERE EMP.DEPTNO = DEPT.DEPTNO

3 GROUP BY DEPT.DEPTNO

4 ORDER BY DEPT.DEPTNO;

DEPTNO MIN(EMP.SAL)

---------- ------------

10 1300

20 800

30 950

3) 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 |

SQL> SELECT EMP.EMPNO, EMP.ENAME, EMP.JOB, EMP.SAL, EMP.DEPTNO, DEPT.DNAME FROM

EMP, DEPT

2 WHERE EMP.DEPTNO = DEPT.DEPTNO

3 AND

4 EMP.JOB= 'CLERK';

EMPNO ENAME JOB SAL DEPTNO DNAME

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7934 MILLER CLERK 1300 10 ACCOUNTING

7876 ADAMS CLERK 1100 20 RESEARCH

7369 SMITH CLERK 800 20 RESEARCH

7900 JAMES CLERK 950 30 SALES

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

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

SQL> SELECT EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, DEPT.DEPTNO FROM EMP, DEPT

2 WHERE DEPT.DEPTNO = EMP.DEPTNO AND

3 EMP.DEPTNO = (SELECT DEPTNO FROM EMP WHERE ENAME = 'FORD');

EMPNO ENAME JOB MGR HIREDATE SAL DEPTNO

---------- ---------- --------- ---------- --------- ---------- ----------

7369 SMITH CLERK 7902 17-DEC-80 800 20

7566 JONES MANAGER 7839 02-APR-81 2975 20

7788 SCOTT ANALYST 7566 19-APR-87 3000 20

7876 ADAMS CLERK 7788 23-MAY-87 1100 20

7902 FORD ANALYST 7566 03-DEC-81 3000 20

5) 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 |

SQL> SELECT EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, DEPT.DEPTNO FROM EMP, DEPT

2 WHERE DEPT.DEPTNO = EMP.DEPTNO AND

3 EMP.DEPTNO = (SELECT DEPTNO FROM EMP WHERE ENAME = 'WARD') AND

4 EMP.SAL > (SELECT SAL FROM EMP WHERE ENAME = 'MARTIN');

EMPNO ENAME JOB MGR HIREDATE SAL DEPTNO

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7499 ALLEN SALESMAN 7698 20-FEB-81 1600 30

7698 BLAKE MANAGER 7839 01-MAY-81 2850 30

7844 TURNER SALESMAN 7698 08-SEP-81 1500 30

6) 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 |

SQL> SELECT EMPNO, ENAME, EMP.DEPTNO, DEPT.DNAME, DEPT.LOC FROM EMP, DEPT

2 WHERE DEPT.DEPTNO = EMP.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

EMPNO ENAME DEPTNO DNAME LOC

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7900 JAMES 30 SALES CHICAGO

7902 FORD 20 RESEARCH DALLAS

7934 MILLER 10 ACCOUNTING NEW YORK

14 rows selected.

7) DISPLAY THE FOLLOWING RESULT

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

SQL> SELECT EMP.DEPTNO, DEPT.DNAME, EMP.ENAME FROM EMP, DEPT

2 WHERE DEPT.DEPTNO = EMP.DEPTNO

3 ORDER BY EMP.DEPTNO;

DEPTNO DNAME ENAME

---------- -------------- ----------

10 ACCOUNTING CLARK

10 ACCOUNTING KING

10 ACCOUNTING MILLER

20 RESEARCH SMITH

20 RESEARCH JONES

20 RESEARCH SCOTT

20 RESEARCH ADAMS

20 RESEARCH FORD

30 SALES ALLEN

30 SALES WARD

30 SALES MARTIN

DEPTNO DNAME ENAME

---------- -------------- ----------

30 SALES BLAKE

30 SALES TURNER

30 SALES JAMES

14 rows selected.

8) 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 |

SQL> SELECT EMP.ENAME, EMP.DEPTNO, DEPT.DNAME, DEPT.LOC FROM EMP, DEPT

2 WHERE DEPT.DEPTNO = EMP.DEPTNO AND

3 DEPT.LOC = 'NEW YORK';

ENAME DEPTNO DNAME LOC

---------- ---------- -------------- -------------

CLARK 10 ACCOUNTING NEW YORK

KING 10 ACCOUNTING NEW YORK

MILLER 10 ACCOUNTING NEW YORK

9) 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 |

SQL> SELECT ENAME, SAL, DNAME FROM EMP E INNER JOIN DEPT D ON(E.DEPTNO = D.DEPTN

O)

2 WHERE SAL IN (SELECT MIN(SAL) FROM EMP GROUP BY DEPTNO);

ENAME SAL DNAME

---------- ---------- --------------

JAMES 950 SALES

SMITH 800 RESEARCH

MILLER 1300 ACCOUNTING

10) 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 |

SQL> SELECT EMPNO, JOB, MGR, SAL, DNAME FROM EMP E INNER JOIN DEPT D ON(E.DEPTNO

= D.DEPTNO)

2 WHERE SAL IN (SELECT MAX(SAL) FROM EMP GROUP BY DEPTNO);

EMPNO JOB MGR SAL DNAME

---------- --------- ---------- ---------- --------------

7698 MANAGER 7839 2850 SALES

7902 ANALYST 7566 3000 RESEARCH

7788 ANALYST 7566 3000 RESEARCH

7839 PRESIDENT 5000 ACCOUNTING

11) 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 |

SQL> SELECT B.ENAME AS BOSS, COUNT(\*) AS SUBORDINATE FROM EMP E JOIN EMP B ON B.

EMPNO=E.MGR

2 GROUP BY B.EMPNO,B.ENAME;

BOSS SUBORDINATE

---------- -----------

JONES 2

CLARK 1

KING 3

BLAKE 5

FORD 1

SCOTT 1

6 rows selected.

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

(SELF-JOIN)

SQL> SELECT DISTINCT E.ENAME AS EMPLOYEE, E.JOB AS DESIGNATION, E.SAL AS SALARY,

M.ENAME AS MANAGER, M.JOB AS DESIGNATION, M.SAL AS SALARY FROM EMP E INNER JOIN

EMP M ON E.MGR = M.EMPNO;

EMPLOYEE DESIGNATI SALARY MANAGER DESIGNATI SALARY

---------- --------- ---------- ---------- --------- ----------

JAMES CLERK 950 BLAKE MANAGER 2850

TURNER SALESMAN 1500 BLAKE MANAGER 2850

ADAMS CLERK 1100 SCOTT ANALYST 3000

ALLEN SALESMAN 1600 BLAKE MANAGER 2850

MILLER CLERK 1300 CLARK MANAGER 2450

WARD SALESMAN 1250 BLAKE MANAGER 2850

SCOTT ANALYST 3000 JONES MANAGER 2975

MARTIN SALESMAN 1250 BLAKE MANAGER 2850

SMITH CLERK 800 FORD ANALYST 3000

CLARK MANAGER 2450 KING PRESIDENT 5000

BLAKE MANAGER 2850 KING PRESIDENT 5000

EMPLOYEE DESIGNATI SALARY MANAGER DESIGNATI SALARY

---------- --------- ---------- ---------- --------- ----------

FORD ANALYST 3000 JONES MANAGER 2975

JONES MANAGER 2975 KING PRESIDENT 5000

13 rows selected.

13) 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 |

SQL> CREATE TABLE ODER (

2 ID NUMERIC(4) CONSTRAINT ID\_ODER\_PK PRIMARY KEY,

3 ORDER\_DATE DATE,

4 ORDER\_NUMBER NUMERIC(4)

5 );

Table created.

SQL> CREATE TABLE PRODUCT (

2 ID NUMERIC(4) CONSTRAINT ID\_PRODUCT\_PK PRIMARY KEY,

3 PRODUCTNAME VARCHAR(20)

4 );

Table created.

SQL> CREATE TABLE ORDER\_ITEM (

2 ID NUMERIC(4) CONSTRAINT ID\_ORDER\_ITEM\_PK PRIMARY KEY,

3 ORDERID NUMERIC(4) CONSTRAINT ID\_ODER\_FK REFERENCES ODER(ID),

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

5 UNITPRICE NUMERIC(10,2),

6 QUANTITY NUMERIC(4)

7 );

Table created.

SQL> INSERT INTO ODER VALUES ( 01,'07-APR-2012',7369);

1 row created.

SQL> INSERT INTO ODER VALUES ( 02,'02-OCT-2011',7900);

1 row created.

SQL> INSERT INTO ODER VALUES ( 03,'23-NOV-2015',7934);

1 row created.

SQL> INSERT INTO PRODUCT VALUES (01,'EASY-TRADING');

1 row created.

SQL> INSERT INTO PRODUCT VALUES (02,'BANK-ANYWHERE');

1 row created.

SQL> INSERT INTO PRODUCT VALUES (03,'TRIP-MANAGER');

1 row created.

SQL> INSERT INTO ORDER\_ITEM VALUES (01,01,01,20,800);

1 row created.

SQL> INSERT INTO ORDER\_ITEM VALUES (02,02,02,30,950);

1 row created.

SQL> INSERT INTO ORDER\_ITEM VALUES (03,03,03,10,1300);

INSERT INTO ORDER\_ITEM VALUES (03,03,03,10,1300)

SQL> INSERT INTO ORDER\_ITEM VALUES (03,03,03,10,1300);

1 row created.

14) FIND THE 2ND MINIMUM SALARY OF THE EMPLOYEE.

SQL> SELECT ORDER\_NUMBER AS ORDER\_NO, ORDER\_DATE, PRODUCTNAME, QUANTITY, UNITPRI

CE FROM ODER, ORDER\_ITEM, PRODUCT

2 WHERE ODER.ID=ORDER\_ITEM.ORDERID AND

3 ORDER\_ITEM.PRODUCTID = PRODUCT.ID;

ORDER\_NO ORDER\_DAT PRODUCTNAME QUANTITY UNITPRICE

---------- --------- -------------------- ---------- ----------

7369 07-APR-12 EASY-TRADING 800 20

7900 02-OCT-11 BANK-ANYWHERE 950 30

7934 23-NOV-15 TRIP-MANAGER 130 10

SQL> SELECT MIN(SAL) FROM EMP

2 WHERE SAL NOT IN (SELECT MIN(SAL) FROM EMP);

MIN(SAL)

----------

950

15) FIND THE MAX 3 SALARIES FROM EMPLOYEE TABLE.

SQL> SELECT \*FROM

2 (

3 SELECT \*FROM emp

4 ORDER BY Sal desc

5 )

6 WHERE rownum <= 3

7 ORDER BY Sal DESC ;

EMPNO ENAME JOB MGR HIREDATE SAL COMM

---------- ---------- --------- ---------- --------- ---------- ----------

DEPTNO

----------

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

16) DISPLAY COMMON RECORDS FROM EMP\_1 & EMP\_2 TABLES. (USE INTERSECT)

SQL> SELECT DEPTNO

2 FROM EMP

3 WHERE DEPTNO IN (SELECT DEPTNO FROM EMP INTERSECT SELECT DEPTNO FROM DEPT);

DEPTNO

----------

20

30

30

20

30

30

10

20

10

30

20

DEPTNO

----------

30

20

10

14 rows selected.

17) DISPLAY DEPARTMENT NO WISE TOTAL SALARY WHERE MORE THAN 2 EMPLOYEES EXIST IN A DEPARTMENT

SQL> SELECT DEPTNO, SUM(SAL) FROM EMP

2 WHERE (SELECT COUNT(\*)

3 FROM Emp

4 ) > 2

5 GROUP BY DEPTNO;

DEPTNO SUM(SAL)

---------- ----------

30 9400

20 10875

10 8750