***MySQL Assignments (Table Join & Sub queries)***

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

SELECT e.name as emp\_name, e.salary as emp\_salary, d.name as dept\_name FROM EMP e JOIN DEPT d

ON d.id= e.dept\_no where e.salary=(Select min(salary) from emp);

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

* LIST MINIMUM SALARY FOR EACH DEPARTMENT

SELECT DEPT\_NO AS DEPTNO, SALARY

FROM emp e WHERE SALARY=(SELECT MIN(SALARY) FROM emp T WHERE e.DEPT\_NO=t.DEPT\_NO )

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

* DISPLAY DETAILS OF EMPLOYEES WHO ARE ASSOCIATED WITH SOME DEPARTMENT.

**Select e.id as empno ,e.name as empname,e.role as job,**

**e.salary as salary,e.dept\_no as dept\_no,**

**d.name as dept\_name from emp e JOIN dept d where 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 |

* LIST ALL THE EMPLOYEES WHO ARE WORKING IN EMPLOYEE NAME FORD’S DEPARTMENT.

Select \* from emp where dept\_no IN(Select id from dept where name='Rnd'

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

* LIST ALL EMPLOYEE WHO ARE WORKING IN WARD'S DEPARTMENT AND EARNING MORE THEN MARTIN

SELECT \* from emp e where e.DEPT\_NO= (Select id from dept where name='RnD') and salary >(Select salary from emp where name='Robert');

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

* DISPLAY EMPLOYEE NUMBER, NAME,DEPT NUMBER, DEPT NAME, AND LOCATION

**SELECT e.id, e.NAME,e.dept\_no ,d.name,e.location 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 | SeALES | 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 |

* DISPLAY THE DEPARTMENT WISE EMPLOYEE NAMES & SORT BASED UPON DEPARTMENT’S NO.

SELECT e.name,d.id,d.name as dept\_name from emp e right outer 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 |

* LIST ALL THE EMPLOYEE WHO ARE WORKING IN NEW YORK

**SELECT e.id, e.NAME,e.id,d.name from emp e join dept d on(e.DEPT\_NO=d.id)**

**where d.location='NEW YORK'**

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

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

SELECT e.name,e.salary as miniSalary,e.DEPT\_NO from emp e where salary in (Select min(salary) from emp d where e.dept\_no=d.dept\_no);

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

* 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.salary as maxSalary,e.DEPT\_NO,e1.name as managerName from emp e left outer join emp e1 on(e.id=e1.MANAGER\_ID) where e.salary in (Select max(e.salary) from emp d where e.dept\_no=d.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 |

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

SELECT e.NAME, COUNT(\*) as subodinates\_reporting FROM emp e JOIN emp b ON b.ID=e.MANAGER\_ID GROUP BY b.ID, b.NAME

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

* 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 as emp\_name,e.salary as emp\_salary,e.role as designation,t.name as manager\_name, t.role as manager\_design,t.salary as manager\_salary from emp e join emp t where e.id=t.manager\_id;

* Create the following tables:

My\_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 |

Find the 2nd minimum salary of the employee.

select \* from emp

where salary = (select min(salary) from emp

where salary > (select min(salary) from emp));

Or we can have

SELECT MIN(SALARY) FROM EMP WHERE SALARY!=(SELECT MIN(SALARY) FROM EMP);

* Find the max 3 salaries from employee table.

select salary from emp ORDER BY SALARY DESC LIMIT 3

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

SELECT d.Name, SUM(e.SALARY) AS TotalAmount FROM dept d INNER JOIN emp e ON d.ID=e.DEPT\_NO GROUP BY d.NAME ORDER BY TotalAmount DESC