**Tricky SQL Queries**

**Q1: Find the 3rd MAX salary in the emp table.**

**Ans:** select distinct from emp e1 where 3 = (select count(distinct sal) from emp e2 where e1.sal <= e2.sal);

select max(salary) from EMPLOYEE1 where salary < (select max(salary) from EMPLOYEE1);

**Q2: Find the 3rd MIN salary in the emp table.**

**Ans:** select distinct sal from emp e1 where 3 = (select count(distinct sal) from emp e2where e1.sal >= e2.sal);

**Q3: Select FIRST n records from a table.**

**Ans:** select \* from emp where rownum <= &n;

**Q4: Select LAST n records from a table**

**Ans:** select \* from emp minus select \* from emp where rownum <= (select count(\*) - &n from emp);

**Q5: List dept no., Dept name for all the departments in which there are no employees in the department.**

**Ans:** select \* from dept where deptno not in (select deptno from emp);

alternate solution: select \* from dept a where not exists (select \* from emp b where a.deptno = b.deptno);

alternate solution: select empno,ename,b.deptno,dname from emp a, dept b where a.deptno(+) = b.deptno and empno is null;

Q6: How to get 3 Max salaries ?

A: select distinct sal from emp a where 3 >= (select count(distinct sal) from emp b where a.sal <= b.sal) order by a.sal desc;

Q7: How to get 3 Min salaries ?

A: select distinct sal from emp a where 3 >= (select count(distinct sal) from emp b where a.sal >= b.sal);

Q8: How to get nth max salaries ?

A: select distinct hiredate from emp a where &n = (select count(distinct sal) from emp b where a.sal >= b.sal);

Q9: Select DISTINCT RECORDS from emp table.

A: select \* from emp a where rowid = (select max(rowid) from emp b where a.empno=b.empno);

Q10: How to delete duplicate rows in a table?

A: delete from emp a where rowid != (select max(rowid) from emp b where a.empno=b.empno);

Q11: Count of number of employees in department wise.

A: select count(EMPNO), b.deptno, dname from emp a, dept b where a.deptno(+)=b.deptno group by b.deptno,dname;

Q12: Suppose there is annual salary information provided by emp table. How to fetch monthly salary of each and every employee?

A: select ename,sal/12 as monthlysal from emp;

Select all record from emp table where deptno =10 or 40.

select \* from emp where deptno=30 or deptno=10;

Select all record from emp table where deptno=30 and sal>1500.

select \* from emp where deptno=30 and sal>1500;

Select all record from emp where job not in SALESMAN or CLERK.

select \* from emp where job not in ('SALESMAN','CLERK');

Select all record from emp where ename in 'BLAKE','SCOTT','KING'and'FORD'.

select \* from emp where ename in('JONES','BLAKE','SCOTT','KING','FORD');

Select all records where ename starts with ‘S’ and its lenth is 6 char.

select \* from emp where ename like'S\_';

Select all records where ename may be any no of character but it should end with ‘R’.

select \* from emp where ename like'%R';

Count MGR and their salary in emp table.

select count(MGR),count(sal) from emp;

In emp table add comm+sal as total sal .

select ename,(sal+nvl(comm,0)) as totalsal from emp;

Select any salary <3000 from emp table.

select \* from emp where sal> any(select sal from emp where sal<3000);

Select all salary <3000 from emp table.

select \* from emp where sal> all(select sal from emp where sal<3000);

Select all the employee group by deptno and sal in descending order.

select ename,deptno,sal from emp order by deptno,sal desc;

How can I create an empty table emp1 with same structure as emp?

Create table emp1 as select \* from emp where 1=2;

How to retrive record where sal between 1000 to 2000?

Select \* from emp where sal>=1000 And sal<2000

Select all records where dept no of both emp and dept table matches.

select \* from emp where exists(select \* from dept where emp.deptno=dept.deptno)

If there are two tables emp1 and emp2, and both have common record. How can I fetch all the recods but common records only once?

(Select \* from emp) Union (Select \* from emp1)

How to fetch only common records from two tables emp and emp1?

(Select \* from emp) Intersect (Select \* from emp1)

How can I retrive all records of emp1 those should not present in emp2?

(Select \* from emp) Minus (Select \* from emp1)

Count the totalsa deptno wise where more than 2 employees exist.

SELECT deptno, sum(sal) As totalsal

FROM emp GROUP BY deptno HAVING COUNT(empno) > 2

**Q13:** [**Way to insert text having ' (apostrophe) into a SQL table**](http://stackoverflow.com/questions/8336812/way-to-insert-text-having-apostrophe-into-a-sql-table)

Ans:

CREATE TABLE [dbo].[ModeRequirements] (

[modeType] varchar(100) primary key)

insert into ModeRequirements(modeType) values ('Intermodal 40'''), ('Intermodal 45'''), ('Intermodal 48'''), ('Intermodal 53'''), ('LTL'), ('Team'), ('Triaxle'), ('Truckload');