

## Select Nth maximum salary from a table

Write a query to select Nth maximum salary from EMP table

(or) Write a query to find 2nd, 3rd max salary from EMP table

(or) Write a query to find 10 highest salary

(Or) Write a query to find 4th highest salary (without analytical function)

We can achieve this by using the correlated sub query. In the below example we are getting the 5th highest salary without using the Analytical function.

```
select * from emp emp1 where (5-1) = ( select count(distinct(emp2.sal)) from  
emp emp2 where emp2.sal > emp1.sal )
```

In the below example we are getting the 5th highest salary by using the Analytical function.

```
select * from ( select e.*, DENSE_RANK() over (order by sal DESC) RN from  
emp e ) where RN=5
```

## Select maximum N salaries from EMP Table

Write a query to select top N salaries from the EMP table

(or) Write a query to select maximum N salaries from the EMP table

Answer: We can achieve this by using the DENSE\_RANK Analytical function. In the below example we are getting the TOP 5 salaries from the EMP table.

```
select * from ( select e.*, DENSE_RANK() over (order by sal DESC) RN from emp e )  
where RN <=5
```

### **Select top N salaries from each Department of EMP table**

Write a query to select top N salaries from each department of the EMP table  
(or) Write a query to select maximum N salaries from each department of the EMP table

Answer: We can achieve this by using the DENSE\_RANK Analytical function. In the below example we are getting the TOP 3 salaries for each department of the EMP table.

```
select * from ( select e.*, DENSE_RANK() over (partition by deptno order by sal DESC) RN from emp e ) where RN <=3
```

### **Select/Delete duplicate rows from EMP table**

```
select * from emp where rowid not in ( select min(rowid) from emp group by empno );
```

```
delete from emp where rowid not in ( select min(rowid) from emp group by empno );
```

### **Same salary query**

Write a query to select only those employee information who are earning the same salary?

Answer: We can achieve this in at least 3 ways...

1 st way

```
select e1.* from emp e1,emp e2 where e1.sal=e2.sal and e1.ename <> e2.ename
```

2 nd way

```
select * from emp where sal in (select sal from emp group by sal having count(sal)>=2 )
```

3 rd way

```
SELECT * FROM ( SELECT e.*, count(*) Over (Partition BY sal ORDER BY sal) cnt FROM emp e ) WHERE cnt>=2;
```

### **Odd/Even rows Question...**

Write a query to display even/odd number rows from a table.

We can achieve this by using the ROWNUM pseudo column.

```
select * from (select empno, ename, sal, rownum rn from emp order by empno ) where  
mod (rn, 2) <> 0 order by rn
```

### **More than 2 employees Question**

Write a query to display the employee information, who have more than 2 employees under a manager

We can achieve this by using the COUNT analytical function.

```
select * from ( SELECT e.*, count(mgr) over (partition by mgr) as cnt from emp  
e ) where cnt >= 2
```

### **Maximum salary without using functions**

Write a query to find the maximum salary from the EMP table without using functions.

We can achieve this by using the SELF joins.

```
select * from emp where sal not in ( select A.sal from emp A, emp B  
where A.sal < B.sal )
```

### **Find the number of rows in a table without using COUNT function**

Write a query to find the number of rows in a table without using COUNT function..

Answer:

```
SELECT MAX(rn) FROM ( SELECT ROW_NUMBER() OVER(ORDER BY empno  
DESC) as rn FROM emp )
```

### **Find the LAST inserted record in a table**

Write a query to find the LAST inserted record in a table.

Answer:

If you want the last record inserted, you need to have a timestamp or sequence number assigned to each record as they are inserted and then you can use the below query...

```
select * from t where TIMESTAMP_COLUMN = (select  
max(timestamp_column) from T) and rownum = 1;
```

### **Select LAST n records from a table**

Write a query to select the last N records from a table...

Or Explain the below query...

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

**Write a query to find the employees who are working in the company for the past 5 years.**

Answer: We can achieve this using the ADD\_MONTHS function.

```
select * from emp where hiredate < add_months(sysdate,-60);
```