

ANALYTICAL FUNCTIONS



*Analytical functions are used
To reduce the response time*

*Increases the speed of
Slow Running Queries*

Mainly used DSS environment

DSS –Decision support Systems

Less users

Hugeeeeeee Data Volume

MIN LAG

MAX LEAD

AVG COUNT

SUM

RANK

DENSE RANK

WHAT IS RANK

COUNTRY

RATINGS

RANK

England

130



New Zealand

117



Sri Lanka

117



South Africa

113



Australia

111



WHAT IS DENSE RANK

COUNTRY

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Analytics

Ordered Array Semantics in SQL queries

Select deptno,ename,sal

```
Row_number() over (partition by dno
                    Order by sal desc )
from emp
```

from emp

| Deptno | Ename | Sal |
|--------|--------|------|
| 10 | King | 5000 |
| 10 | Clark | 2450 |
| 20 | Miller | 1300 |
| 30 | | |

Aggregate Example

Identify the ranks

```
SELECT deptno, ename, salary,  
       RANK() OVER (PARTITION BY  
                     deptno ORDER BY salary) "rank"  
FROM   emp WHERE deptno = 30
```

DENSE RANK

Identify top 3 salaries in each department"?

```
select *  
  from ( select deptno, ename, sal,  
               dense_rank() over ( partition by  
deptno order by sal desc ) "dr"  
from emp )  
 where dr <= 3    order by deptno, sal desc
```