

DENSE_RANK Function in Oracle

The DENSE_RANK Function in Oracle is used to return sequential numbers starting from 1 based on the ordering of rows imposed by the ORDER BY clause. When we have two records with the same data, then it will give the same rank to both the rows. The following is the syntax to use the DENSE RANK function in Oracle. As you can see, like the RANK and Row Number functions,

DENSE_RANK Function without PARTITION BY Clause in Oracle

```
SELECT Id, Department, Salary, Name,  
DENSE_RANK() OVER (ORDER BY Name ASC ) AS "DenseRank"  
FROM Employees3;
```

```
SQL> SELECT Id, Department, Salary, Name,  
2 DENSE_RANK() OVER (ORDER BY Name ASC ) AS "DenseRank"  
3 FROM Employees;
```

ID	DEPARTMENT	SALARY	NAME	DenseRank
7	HR	65000	Ben	1
9	IT	35000	David	2
5	IT	35000	David	2
1	IT	80000	James	3
11	IT	68000	John	4
3	HR	50000	Pamela	5
4	HR	40000	Sara	6
6	HR	65000	Smith	7
10	HR	65000	Smith	7
8	IT	45000	Stokes	8
2	IT	80000	Taylor	9

DENSE_RANK Function with PARTITION BY clause in Oracle:

```
SELECT Id, Department, Salary, Name,  
RANK() OVER (PARTITION BY Department ORDER BY Salary DESC ) AS "DenseRank"  
FROM Employees3;
```

Fetch the 2nd Highest Salary using the DENSE RANK function in Oracle:

```
WITH EmployeeCTE AS
(
    SELECT Salary,
           DENSE_RANK() OVER (ORDER BY Salary DESC) AS Rank_Salry
    FROM Employees3
)
SELECT Salary FROM EmployeeCTE WHERE Rank_Salry = 2 FETCH FIRST 1 ROWS ONLY;
```

Example to find the nth Highest Salary Department wise:

```
WITH EmployeeCTE AS
(
    SELECT Salary, Department,
           DENSE_RANK() OVER (PARTITION BY Department ORDER BY Salary DESC)
           AS Salary_Rank
    FROM Employees3
)
SELECT Salary FROM EmployeeCTE WHERE Salary_Rank = 3 AND Department = 'HR' FETCH FIRST
1 ROWS ONLY;
```