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CALL/WHATSAPP - **8970853557 / 9448005273**

IICS COMBO

RANK TRANSFORMATION

IN SQL > IICS CLOUD > POWER CENTER

AN ACTIVE , CONNECTED

Rank transformation is an active and connected transformation that performs the filtering of data based on group and ranks. for example, you want to get ten records of employees having highest salary, such kind of filtering can be done by rank transformation.

The Rank transformation selects the top or bottom range of data. Use the Rank transformation to return the largest or smallest numeric values in a group. You can also use the Rank transformation to return strings at the top or bottom of the mapping sort order.

For example, you can use a Rank transformation to select the top 10 customers by region. Or, you might identify the three departments with the lowest expenses in salaries and overhead.





RANKS CONCEPT IN SQL

ANALYTICAL FUNCTIONS

RANK , DENSE RANK , ROW NUMBERS , LEAD , LAG

INTERVIEWS : 1ST HIGHEST RANK SALARY , 2ND HIGHEST RANK SALARY

TOP 10 SALES VALUE

SALES VALUE	SALES VALUE	Row_number	RANK()	DENSE_RANK()
30000	90000	1	1	1
15000	60000	2	2	2
20000	46000	3	3	3
15000	40000	4	4	4
20000	40000	5	5	5
35000	40000	6	5	5
32000	38000	7	7	6
20000	35000	8	8	7
12000	35000	9	8	7
60000	34000	10	10	8

STIPEND / SALARY /SALES VALUE RANK

RANK

```
SELECT STUDENT_ID,FIRST_NAME , STIPEND ,COORDINATOR_ID,  
RANK()OVER(ORDER BY STIPEND)RANK FROM STUDENTS;
```

```
SELECT STUDENT_ID,FIRST_NAME , STIPEND ,COORDINATOR_ID,  
RANK()OVER(ORDER BY STIPEND DESC)RANK FROM STUDENTS;
```

SALES VALUE

```
SELECT SALES_EX_ID,FIRST_NAME , SALES_VALUE ,COORDINATOR_ID,  
RANK()OVER(ORDER BY SALES_VALUE )RNK FROM SALES_EXECUTIVES;
```

```
SELECT SALES_EX_ID,FIRST_NAME , SALES_VALUE ,COORDINATOR_ID,  
RANK()OVER(ORDER BY SALES_VALUE DESC )RNK FROM SALES_EXECUTIVES;
```

DENSE RANK

```
SELECT SALES_EX_ID,FIRST_NAME , SALES_VALUE ,COORDINATOR_ID,  
DENSE_RANK()OVER(ORDER BY SALES_VALUE)RNK FROM  
SALES_EXECUTIVES;
```

```
SELECT SALES_EX_ID,FIRST_NAME , SALES_VALUE ,COORDINATOR_ID,  
DENSE_RANK()OVER(ORDER BY SALES_VALUE DESC )RNK FROM  
SALES_EXECUTIVES;
```

ROW_NUMBER

```
SELECT SALES_EX_ID,FIRST_NAME , SALES_VALUE ,COORDINATOR_ID,  
ROW_NUMBER()OVER(ORDER BY SALES_VALUE )RNK FROM SALES_EXECUTIVES;
```

```
SELECT SALES_EX_ID,FIRST_NAME , SALES_VALUE ,COORDINATOR_ID,  
ROW_NUMBER()OVER(ORDER BY SALES_VALUE DESC )RNK FROM  
SALES_EXECUTIVES;
```

DEPARTMENT_WISE / RANK

ANYALTICAL FUNCTION

GROUP BY > > > PARTITION BY

```
SELECT SALES_EX_ID,FIRST_NAME , SALES_VALUE ,COORDINATOR_ID,  
RANK()OVER(PARTITION BY COORDINATOR_ID ORDER BY SALES_VALUE) RNK FROM  
SALES_EXECUTIVES;
```

```
SELECT SALES_EX_ID,FIRST_NAME , SALES_VALUE ,COORDINATOR_ID,  
RANK ()OVER(PARTITION BY COORDINATOR_ID ORDER BY SALES_VALUE DESC ) RNK  
FROM SALES_EXECUTIVES;
```

TOP 5 RANKINGS

```
SELECT SALES_EX_ID,FIRST_NAME , SALES_VALUE ,COORDINATOR_ID,  
RANK()OVER(ORDER BY SALES_VALUE DESC )  
RNK FROM SALES_EXECUTIVES WHERE RNK <= 5;
```

ERROR ; RNK IS NOT A PHYSICAL COLUMN

SUB QUERY CONCEPT

```
SELECT * FROM (SELECT SALES_EX_ID,FIRST_NAME ,  
SALES_VALUE ,COORDINATOR_ID,  
RANK()OVER(ORDER BY SALES_VALUE DESC )  
RNK FROM SALES_EXECUTIVES) WHERE RNK <= 5;
```

TOP 1ST SALES VALUE

```
SELECT * FROM (SELECT SALES_EX_ID,FIRST_NAME ,  
SALES_VALUE ,COORDINATOR_ID,  
RANK()OVER(ORDER BY SALES_VALUE DESC )  
RNK FROM SALES_EXECUTIVES) WHERE RNK = 1;
```

TOP 1ST SALES VALUE DEP / COORD WISE

```
SELECT * FROM (SELECT SALES_EX_ID,FIRST_NAME ,  
SALES_VALUE ,COORDINATOR_ID,  
RANK()OVER(PARTITION BY COORDINATOR_ID ORDER BY  
SALES_VALUE DESC )  
RNK FROM SALES_EXECUTIVES) WHERE RNK = 1;
```

RANK IN IICS CLOUD



GO TO INCOING FIELDS

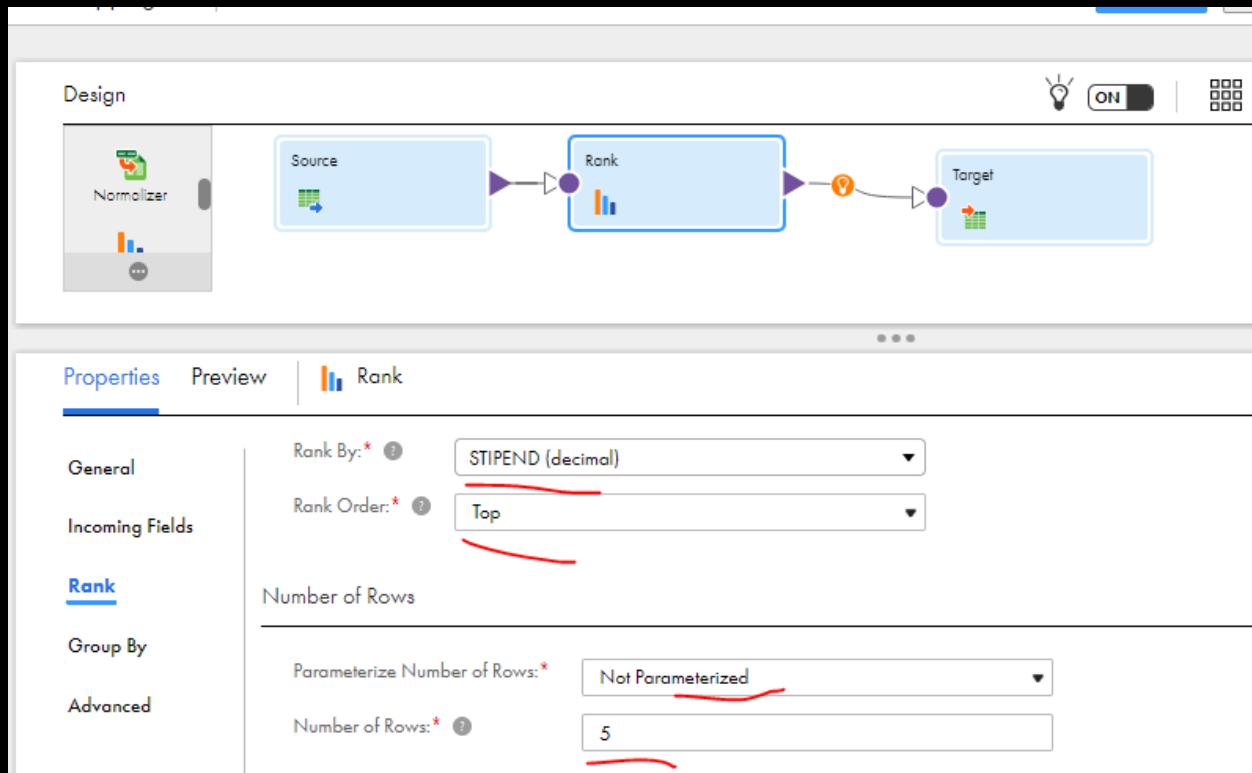
The screenshot shows the IICS Cloud interface in 'Design' mode. On the left, there is a sidebar with a 'Normalizer' icon and a '...' button. The main area displays a data flow with three components: 'Source' (with a grid icon), 'Rank' (with a bar chart icon), and 'Target' (with a grid icon). A yellow exclamation mark icon is positioned between the Rank and Target components. Below the flow, there is a navigation bar with 'Properties' and 'Preview' tabs, and a 'Rank' tab is selected. The 'Properties' section is divided into sections: General, Incoming Fields, Rank, Group By, and Advanced. The 'Incoming Fields' section contains the following table:

	Name	Type	Length	Scale	Format
General	COORDINATOR_ID	decimal	10	0	SN
Incoming Fields	EMAIL	string	25	0	SN
Rank	FIRST_NAME	string	20	0	SN
Group By	JOINING_DATE	date/time	29	9	SN
Advanced	LAST_NAME	string	25	0	SN
	MANAGER_ID	decimal	6	0	SN

GO TO RANK

YOU CAN SELECT WHICH COLUMN TO RANK
HERE STIPEND
THAN TOP OR BOTTOM - TOP

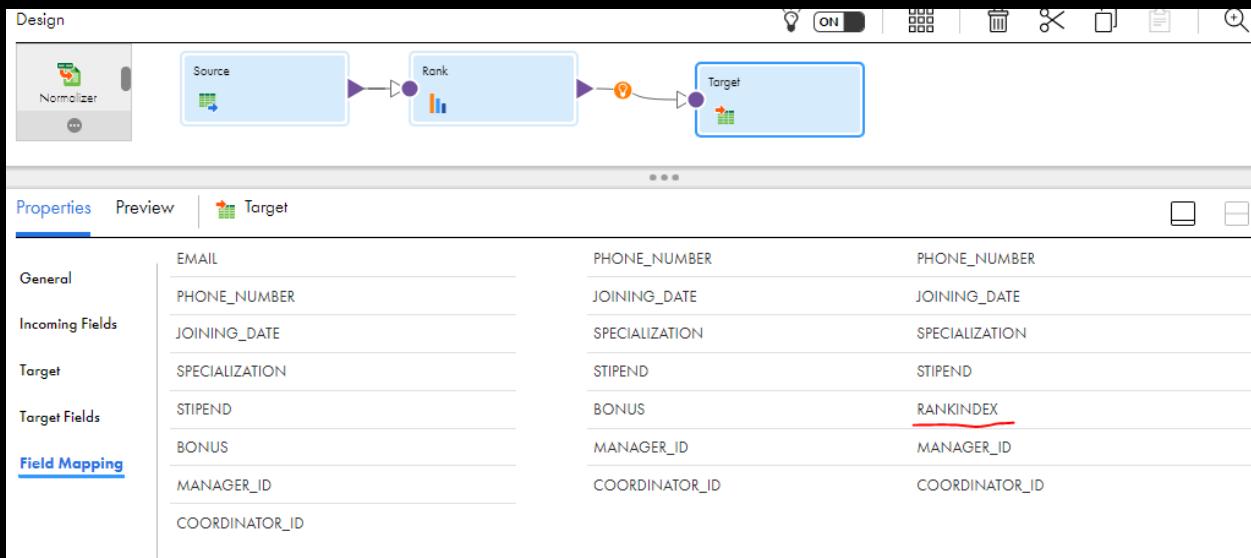
NUMBER OF ROWS WHICH RANK SO TOP 5 OK



YOU CAN DO RANKING ONLY FOR ONE FIELD

COME TO GROUP BY
AS OF NOW I AM NOT DOING ANY GROUP BY
THAN GO TO ADVANCED

GO TO TARGET CONNECT RANK INDEX TO BONUS



SNOWFLAKE

The screenshot shows a Snowflake query results page. The query is:create table T_FF_FWF
(
STUD_ID number(10),

The results table has the following columns: STUDENT_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, ..., JOINING_DATE, SPECIALIZATION, STIPEND, BONUS, and MANAGER_ID. The BONUS column values are 1.00, 2.00, 3.00, 3.00, and 5.00 respectively. The last row (STUDENT_ID 102) has a red circle around the BONUS value of 5.00.

	STUDENT_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	...	JOINING_DATE	SPECIALIZATION	STIPEND	BONUS	MANAGE
1	106	VIJAY	KUMAR	VIJAY@GMAIL	944.800.5268		1990-03-02	IICSCOMBO	6000.00	1.00	
2	103	PAVAN	KUMAR	PAVAN@GMAIL	944.800.5276		1992-03-02	IICSCOMBO	4100.00	2.00	
3	107	VENAKTESH	SWAMY	VENAKTESH@	995.623.5825		1989-02-03	TALEND	3600.00	3.00	
4	108	PAVAN	KUMAR	PAVAN@GMAIL	995.623.5826		1990-02-03	TALEND	3600.00	3.00	
5	102	ABHI	MANYU	ABHI@GMAIL.I	944.800.5272		1990-03-02	IICSCOMBO	3500.00	5.00	

