Snowflake SQL

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Can you explain what the “Qualify” keyword does in Snowflake SQL?

Qualify keyword is an enhancement that is available in Snowflake and not part of ANSI SQL .

Qualify helps us when we are using windows functions like Rank or Row_Number.

With Qualify we can use the windows functions directly in the Filter clause to filter based on the return value of the windows function.

```
SELECT
i, p, o,
ROW_NUMBER() OVER (PARTITION BY p ORDER BY o) AS row_num
FROM qt
WHERE row_num = 1
```

```
SELECT
i, p, o,
ROW_NUMBER() OVER (PARTITION BY p ORDER BY o) AS row_num
FROM qt
QUALIFY row_num = 1
```

#How can you change rows to columns in Snowflake ?

We can use PIVOT to change rows to columns in Snowflake.

#How can you change columns to rows in Snowflake ?

Use UNPIVOT to change columns to rows in Snowflake.

What does the DATE_PART function do ?

DATE_PART is a date function which can be used to extract part of the date like the MONTH or DAY or QUARTER.

```
SELECT DATE_PART(QUARTER, '2024-02-22'::DATE);
```

The supported parts that can be extracted are
HOUR / MINUTE / SECOND , YEAR / DAY / WEEK/ MONTH / QUARTER

What does the DATE_FROM_PARTS function do ?

DATE_FROM_PART is a date function which can be used to construct dates from date, year or month information.

DATE_FROM_PARTS(<year>, <month>, <day>)

```
SELECT DATE_FROM_PARTS(1947, 7, 15);
-------------------------------------------
              1947-07-15
```

Explain the SPLIT_PART function ?

Split part can split a string based on the split parameter provided to the function

```
SELECT split_part('sujith@snowflake.com', '@',  1) ;
-----------------------------------------------------
                        sujith

SELECT split_part('sujith@snowflake.com', '@',  2) ;
-----------------------------------------------------
                        snowflake.com

SELECT split_part('248-600-7777','-',2) ;
-----------------------------------------------------
                        600
```

SELECT GREATEST(2,13,NULL) , what is the expected answer for this ?

The answer will be NULL, any operation with NULL produces NULL

```
SELECT GREATEST(2,13,77)
-------------------------------
                77
```

```
#  SELECT
        O_CUSTKEY,
        COUNT(*) FROM ORDERS
        GROUP BY ALL
 is this a valid query ?
```

Yes this is a valid query. Snowflake released a behavior change in 2023 to enable GROUP BY ALL.

```
38
39  SELECT O_CUSTKEY, COUNT(*) FROM ORDERS
40  GROUP BY ALL
41
```

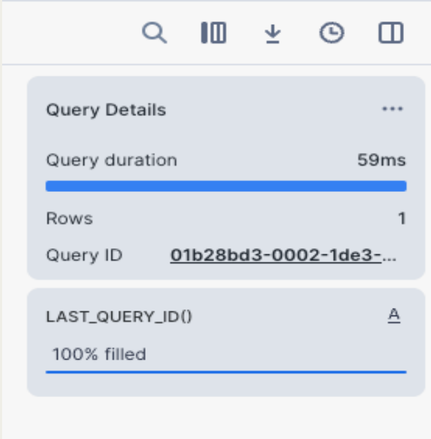
Results | Chart

	O_CUSTKEY	···	COUNT(*)
1	126217		26
2	62579		10
3	60371		9
4	85978		21
5	99457		16
6	102631		21
7	11846		14
8	144784		20
9	125996		9
10	133093		19

Explain the LAST_QUERY_ID() function ?

It returns the query ID for the last command that was used in the session.

```
SELECT * FROM my_table BEFORE(STATEMENT => '8e5d0ca9-005e-44e6-b858-a8f5b37c5726');
```



SELECT LAST_QUERY_ID(); --Last query ID run in the session

SELECT LAST_QUERY_ID(-1);--Last query ID run in the session same as above

SELECT LAST_QUERY_ID(-2); --Returns the query ID of the query run before the last query.

SELECT LAST_QUERY_ID(1);--First query ID run in the session

SELECT LAST_QUERY_ID(2);--Second query ID run in the session

What does the function ARRAY_AGG do ?

ARRAY_AGG takes a column as input and converts rows to array of comma separated values.

```
35  SELECT * FROM TEST_ARRAY_AGG;
36
```

Results | Chart

	GRADES
1	A
2	B
3	C
4	D
5	E

```
37  SELECT ARRAY_TO_STRING(ARRAY_AGG(GRADES),',') FROM TEST_ARRAY_AGG;
38
39
```

Results | Chart

	ARRAY_TO_STRING(ARRAY_AGG(GRADES),',')
1	A,B,C,D,E

```
36
37  SELECT ARRAY_AGG(GRADES) FROM TEST_ARRAY_AGG;
```

Results | Chart

	ARRAY_AGG(GRADES)
1	["A", "B", "C", "D", "E"]

Thank you!

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