Using Ranking Functions

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Ranking Functions – 2005

- **ROW_NUMBER** – An incrementing number unique within a partition

- **RANK** – A number representing the rank of the ORDER BY values within a partition

- **DENSE_RANK** – A number representing the rank of the unique ORDER BY values within a partition

- **NTILE** – A number representing a bucket in which the data has been divided within a partition based on the value of the ORDER BY

Syntax

```
ROW_NUMBER|RANK|DENSE_RANK()
OVER([PARTITION BY <expression>] ORDER BY <expression>)


NTILE(<number of buckets>)
OVER([PARTITION BY <expression>] ORDER BY <expression>)
```

Real World Examples

The Islands Problem

First N
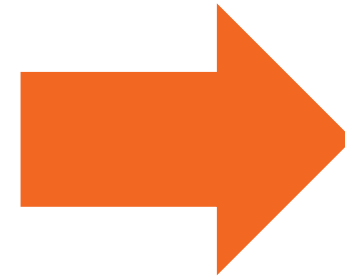
Deduplication

Gold Star

The Islands and Gaps Problem

1,2,3,4,5,8,9,13,14,16,17
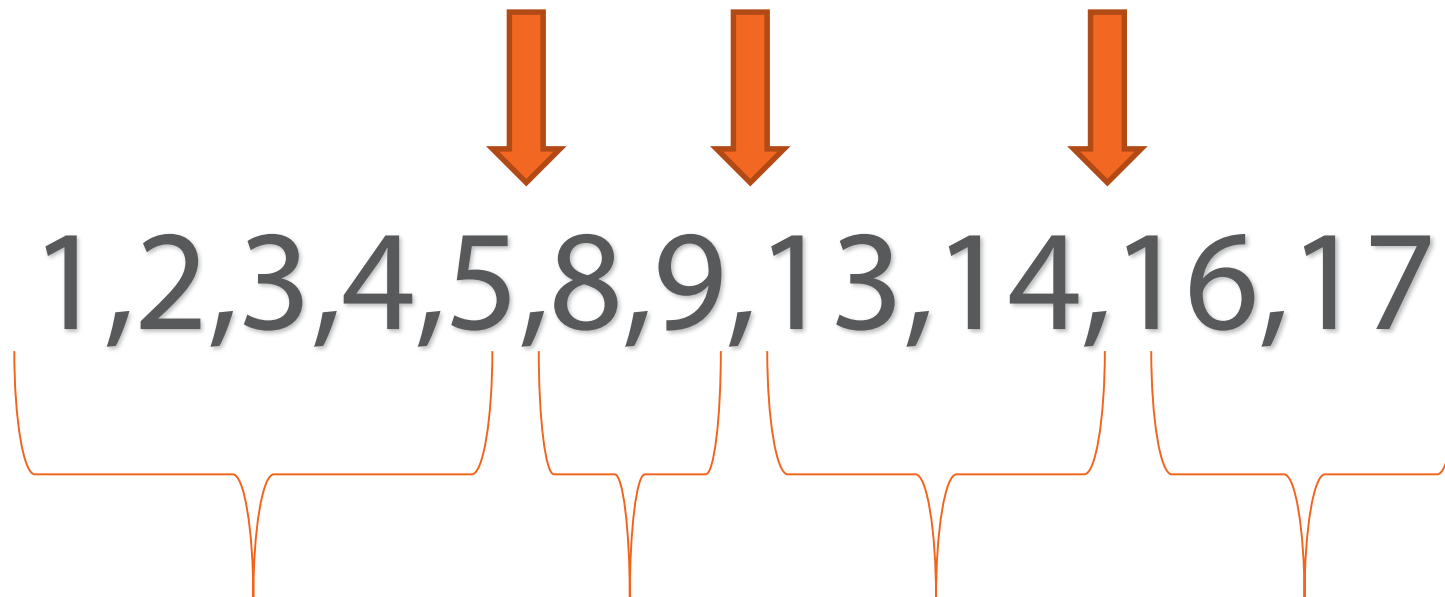
Where Can I Add a Window Function?

May appear in

- SELECT list
- ORDER BY clause

Cannot be found in

- FROM clause
- WHERE clause
- GROUP BY clause
- HAVING clause

➡️ ROWS

Special Situations

TOP

DISTINCT

Performance Considerations

Course Overview

Functions added in 2005 and 2012

Real world examples

Performance Tuning

Coming up next: Window Aggregates