**WINDOW FUNCTIONS**

* We perform calculations on data using various aggregated functions such as **MAX, MIN and AVG**. We get a single output row using these functions.
* Window functions perform an aggregate operation for each row and returns result in detail.
* Window functions applies aggregate, ranking and analytic functions over a particular window (set of rows).
* **OVER** clause is used with window functions to define that window.

**Aggregate Function Window Function**

**100 100 --> 400**

**100 100 --> 400**

**100 100 --> 400**

**100 100 --> 400**

**SUM = 400**

* **Syntax: window\_function** **([ALL] expression)**

**OVER** **([PARTITION BY partition\_list] [ORDER By order\_list])**

* **List of window functions**
* **Over ()**
* **Partition ()**
* **Ranking window functions**
* **RANK () and DENSE\_RANK ()**
* **ROW\_NUMBER ()**
* **NTILE (N)**
* **Value/Analytic window functions**
* **LAG**
* **LEAD**
* **FIRST\_VALUE ()**
* **LAST\_VALUE ()**

**When we use a window function in a query, define the window using OVER () clause.**