

## RANK vs DENSE\_RANK vs ROW\_NUMBER

```
<RankFunction>()  
OVER(  
  [PARTITION BY <attribute list>]  
  ORDER BY <sort attribute list>  
  ) [ AS lde ]
```

- Consider the values in the ascending order
  - (10; 20; 20; 30; 30; 40)
- RANK() of a value is 1 + the number of values that strictly precedes it
  - ranks (1; 2; 2; 4; 4; 6)
- DENSE\_RANK() of a value is 1 + the number of distinct values that precedes it
  - dense ranks (1; 2; 2; 3; 3; 4)
- PERCENT\_RANK() is  $(RANK() - 1) / (TotalRows - 1)$ 
  - percent ranks (0; 0.2; 0.2; 0.6; 0.6; 1)
- ROW\_NUMBER() is the row number
  - row numbers (1; 2; 3; 4; 5; 6)
- CUME\_DIST() of a value is the number of values lower or equal than it / TotalRows
  - cumulative distribution (0.16; 0.5; 0.5; 0.83; 0.83; 1)
- NTILE(3) is the tertile of the value (3 is a parameter, can be any integer)
  - tertiles (1; 1; 2; 2; 3; 3)