SQL

Relevel
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Window functions

Dep wise avg-Sal

Dep.id	avg(sal)
D1	10.5
D2	13.5
D3	10

E.id	Name	Sal	Dep.id	Avg-Dept-Sal
01	Aa	10	D1	10.5
02	Ba	12	D2	13.5
03	CK	11	D1	10.5
04	DM	15	D2	13.5
05	NK	10	D3	10

```
Select *,
        (2)                                  (1)
avg(Sal) over(partition by Dep.id)
  as avg-dept-sal
from employees-data;
```

(1) Windowing → Partition

E.id	Name	Sal	Dep.id	
01	Aa	10	D1	W_1
03	CK	11	D1	W_1
02	Ba	12	D2	W_2
04	DM	15	D2	W_2
05	NK	10	D3	W_3

P_1, P_2, P_3

(2) aggregation → avg(Sal)

on each window

E.id	Name	Sal	Dep.id	avg(Sal
01	Aa	10	D1	10.5
03	CK	11	D1	10.5
02	Ba	12	D2	13.5
04	DM	15	D2	13.5
05	NK	10	D3	10

Window function

aggregation_func(col-name) over(partition by col-name)

aggregation_func(col-name):
- avg(c)
- sum()
- min()
- max()
- count()
- row_number()
- rank()
- dense_rank()

over(partition by col-name): creating window

While we are creating the window we may also order the data within each window

over(partition by dep-id order by salary desc)

within each window created by using dep-id, the data (records) will be orderd by salary coloum descending order.