Querydsl for Oracle(Rank, Dense_Rank, PartitionBy, OrderBy, 칼럼 별칭으로 정렬)

■ Rank, Dense_Rank는 Querydsl에서 기본적으로 지원한다.

1. 작성하려 했던 SQL

```
SELECT ENAME, SAL, DEPTNO,
        RANK() OVER (ORDER BY SAL DESC) EMP_RANK,
        DENSE_RANK() OVER (PARTITION BY DEPTNO
                       ORDER BY SAL DESC) DEPT_RANK
FROM EMP
ORDER BY EMP_RANK, DEPT_RANK;
```

2. JPA, querydsl을 이용하여 작성한 자바코드

```
////////////////////////////////////////////////////
// 사원 급여순위, 부서별 급여순위, RANK, DENSE_RANK
// DENSE_RANK는 1등이 몇명이더라도 다음순위는 2등
//--------------------------------------------------
// [만들려고 했던 SQL 구문]
// SELECT ENAME, SAL, DEPTNO,
//     RANK() OVER (ORDER BY SAL DESC) EMP_RANK,
//     DENSE_RANK() OVER (PARTITION BY DEPTNO
//                    ORDER BY SAL DESC) DEPT_RANK
// FROM EMP
// ORDER BY EMP_RANK, DEPT_RANK;
//--------------------------------------------------
// [Querydsl에서 생성한 SQL 코드]
// select EMP.ENAME, EMP.SAL, EMP.DEPTNO,
//        rank() over (order by EMP.SAL desc) emp_rank,
//        dense_rank() over
//            (partition by EMP.DEPTNO order by EMP.SAL desc) dept_rank
// from EMP EMP
// order by emp_rank asc, dept_rank asc
////////////////////////////////////////////////////
// 칼럼별칭으로 OrderBy하기 위해
```

```
Path<Long> emp_rank = Expressions.numberPath(Long.class, "emp_rank");
Path<Long> dept_rank = Expressions.numberPath(Long.class, "dept_rank");

List<Tuple> rows = queryFactory
        .select(emp.ename, emp.sal, emp.deptno,
                        SQLExpressions
                        .rank().over()
                        .orderBy(emp.sal.desc()).as(emp_rank),
                        SQLExpressions
                        .denseRank().over()
                        .partitionBy(emp.deptno)
                        .orderBy(emp.sal.desc()).as(dept_rank)
        )
        .from(emp)
        .orderBy(((ComparableExpressionBase<Long>)                    emp_rank).asc(),
((ComparableExpressionBase<Long>) dept_rank).asc())
        .fetch();
```

3. 실행된 쿼리 및 결과

```
select EMP.ENAME, EMP.SAL, EMP.DEPTNO,
      rank() over (order by EMP.SAL desc) emp_rank,
      dense_rank() over (partition by EMP.DEPTNO order by EMP.SAL desc) dept_rank
from EMP EMP
order by emp_rank asc, dept_rank asc
```

```
|----------|------|---------|----------|------------|
|ename   |sal   |deptno |emp_rank |dept_rank |
|----------|------|---------|----------|------------|
|KING     |5000 |10       |1          |1            |
|FORD     |3000 |20       |2          |1            |
|SCOTT   |3000 |20       |2          |1            |
|JONES   |2975 |20       |4          |2            |
|BLAKE   |2850 |30       |5          |1            |
|CLARK   |2450 |10       |6          |2            |
|ALLEN   |1600 |30       |7          |2            |
|TURNER |1500 |30       |8          |3            |
|MILLER |1300 |10       |9          |3            |
|WARD    |1250 |30       |10         |4            |
|MARTIN |1250 |30        |10          |4            |
|ADAMS   |1100 |20        |12          |3            |
|JAMES   |950   |30        |13          |5            |
|SMITH   |800   |20        |14          |4            |
|----------|------|---------|----------|------------|
```