WITH 절 / CTE (Common Table Expression)

서브쿼리의 일종

WITH절(clause)이라고도 하고, CTE 라고도 함

하나의 서브쿼리를 또 다른 서브쿼리에서 참조하여 재 사용 가능한 구문

**WITH** dept **AS** (

**SELECT** department\_id

, department\_name dept\_name

**FROM** departments )

**SELECT** a.employee\_id

, a.first\_name || ' ' || a.last\_name

**FROM** employees a, dept b

**WHERE** a.department\_id = b.department\_id

**ORDER BY** 1;

**WITH** dept\_loc **AS** (

**SELECT** a.department\_id, a.department\_name dept\_name

, b.location\_id, b.street\_address, b.city, b.country\_id

**FROM** departments a, locations b

**WHERE** a.location\_id = b.location\_id

),

cont **AS** (

**SELECT** b.department\_id, b.dept\_name, b.street\_address, b.city

, a.country\_name

**FROM** countries a, dept\_loc b

**WHERE** a.country\_id = b.country\_id

)

**SELECT** a.employee\_id, a.first\_name || ' ' || a.last\_name emp\_name

, b.dept\_name, b.street\_address, b.country\_name

**FROM** employees a, cont b

**WHERE** a.department\_id = b.department\_id

**ORDER BY** 1 ;

**Top n Query**

상위 n개, 하위 n개 로우를 조회하는 쿼리

12c부터 기본 문법으로 제공(이전엔 서브쿼리, rownum을 사용해 구형)

**1. ROWNUM 사용**

**SELECT** \*

**FROM**

(**SELECT** a.employee\_id

, a.first\_name||’ ‘||a.last\_name emp\_name

, a.salary

**FROM** employees a

**ORDER BY** a.salary desc)

**WHERE** rownum > 5 ;

**2. ROW\_NUMBER() 사용**

SELECT

FROM ( SELECT a.employee\_id

, a.first\_name||’ ‘||a.last\_name emp\_name

, a.salary,

, ROW\_NUMBER() OVER(ORDER BY A.SALARY DESC) ROW\_SEQ

FROM EMPLOYEES A ) B

WHERE ROW\_SEQ <= 5 ;

**3. FETCH FIRST ROWS 구문**

- FETCH FIRST **5** ROWS ONLY ; 5개 로우만 조회

- FETCH FIRST **5 PERCENT** ROWS ONLY ; 상위 5%까지의 로우를 조회

- ONLY : 해당값만 조회

- WITH TIES : 동일 순위인 값들 모두 조회

**SELECT** A.EMPLOYEE\_ID,

, A.FIRST\_NAME||’ ‘||A.LAST\_NAME EMP\_NAME

, A.SALARY

**FROM** EMPLOYEES A

**ORDER BY** A.SALARY DESC

**FETCH FIRST 5 ROWS ONLY** ;