10차 SQL 과제

1. CRATE TABLE

CREATE OR REPLACE PROCEDURE PRO\_CREATE\_TABLE (PS\_OWNER IN VARCHAR2, PS\_TABLE\_NAME IN VARCHAR2)

IS

VN\_COLUMN\_CNT INTEGER;

USER\_EXCEPTION1 EXCEPTION;

USER\_EXCEPTION2 EXCEPTION;

NULL\_CNT INTEGER;

FUNCTION COLUMN\_CNT(PS\_OWNER VARCHAR2, PS\_TABLE\_NAME VARCHAR2)

RETURN INTEGER

IS

VN\_CNT INTEGER;

BEGIN

SELECT COUNT(\*) INTO VN\_CNT FROM ALL\_TAB\_COLUMNS WHERE OWNER = PS\_OWNER AND TABLE\_NAME = PS\_TABLE\_NAME;

RETURN VN\_CNT;

END COLUMN\_CNT;

PROCEDURE PRO\_CREATE\_TABLE2 (PS\_OWNER IN VARCHAR2, PS\_TABLE\_NAME IN VARCHAR2, PN\_CNT INTEGER)

IS

CURSOR CR IS

SELECT \* FROM (

SELECT PS\_OWNER AS OWNER, 'TABLE' AS OBJECT\_TYPE, PS\_TABLE\_NAME AS OBJECT\_NAME, 1 AS LINE, 'CREATE TABLE '|| PS\_OWNER||'.'||PS\_TABLE\_NAME AS TEXT FROM DUAL

UNION ALL

SELECT PS\_OWNER AS OWNER, 'TABLE' AS OBJECT\_TYPE, PS\_TABLE\_NAME AS OBJECT\_NAME, 2 AS LINE, '(' AS TEXT FROM DUAL

UNION ALL

(SELECT OWNER, 'TABLE', TABLE\_NAME, COLUMN\_ID + 2 AS TEXT,

COLUMN\_NAME || ' ' || DATA\_TYPE || CASE WHEN DATA\_TYPE = 'DATE' THEN NULL

WHEN DATA\_SCALE !=0 THEN '(' || NVL(DATA\_PRECISION, DATA\_LENGTH) || ',' ||DATA\_SCALE || ')'

ELSE '(' ||NVL(DATA\_PRECISION, DATA\_LENGTH) ||')'

END || DECODE(NULLABLE,'N',' NOT NULL') || CASE WHEN PN\_CNT != COLUMN\_ID THEN ','

END TEXT

FROM ALL\_TAB\_COLUMNS

WHERE OWNER = PS\_OWNER

AND TABLE\_NAME = PS\_TABLE\_NAME

)

UNION ALL

SELECT PS\_OWNER AS OWNER, 'TABLE' AS OBJECT\_TYPE, PS\_TABLE\_NAME AS OBJECT\_NAME, PN\_CNT+3 AS LINE, ')' AS TEXT FROM DUAL

UNION ALL

SELECT PS\_OWNER AS OWNER ,'TABLE' AS OBJECT\_TYPE, PS\_TABLE\_NAME AS OBJECT\_NAME, PN\_CNT+4 AS LINE, 'TABLESPACE '|| A.TABLESPACE\_NAME ||';' AS TEXT FROM DUAL,

(SELECT TABLESPACE\_NAME FROM TABS WHERE TABLE\_NAME = PS\_TABLE\_NAME) A

)

ORDER BY OBJECT\_NAME, LINE;

VS\_OWNER VARCHAR2(100);

VS\_OBJECT\_TYPE VARCHAR2(100);

VS\_OBJECT\_NAME VARCHAR2(100);

VN\_LINE INTEGER;

VS\_TEXT VARCHAR2(1000);

BEGIN

OPEN CR;

LOOP

FETCH CR INTO VS\_OWNER,VS\_OBJECT\_TYPE,VS\_OBJECT\_NAME,VN\_LINE,VS\_TEXT;

EXIT WHEN CR%NOTFOUND;

INSERT INTO DDL\_SCRIPTS VALUES(VS\_OWNER,VS\_OBJECT\_TYPE,VS\_OBJECT\_NAME,VN\_LINE,VS\_TEXT);

COMMIT;

END LOOP;

CLOSE CR;

END PRO\_CREATE\_TABLE2 ;

BEGIN

SELECT COUNT(\*) INTO NULL\_CNT FROM ALL\_TAB\_COLUMNS WHERE OWNER = PS\_OWNER;

IF NULL\_CNT =0 THEN

RAISE USER\_EXCEPTION1;

END IF;

SELECT COUNT(\*) INTO NULL\_CNT FROM ALL\_TAB\_COLUMNS WHERE OWNER = PS\_OWNER AND TABLE\_NAME = PS\_TABLE\_NAME;

IF NULL\_CNT =0 THEN

RAISE USER\_EXCEPTION2;

END IF;

VN\_COLUMN\_CNT :=COLUMN\_CNT(PS\_OWNER, PS\_TABLE\_NAME);

PRO\_CREATE\_TABLE2(PS\_OWNER, PS\_TABLE\_NAME, VN\_COLUMN\_CNT);

EXCEPTION

WHEN USER\_EXCEPTION1 THEN

DBMS\_OUTPUT.PUT\_LINE(PS\_OWNER || '가 없습니다.');

WHEN USER\_EXCEPTION2 THEN

DBMS\_OUTPUT.PUT\_LINE(PS\_TABLE\_NAME || '가 없습니다.');

END PRO\_CREATE\_TABLE;

2. CRATE INDEX

CREATE OR REPLACE PROCEDURE PRO\_CREATE\_INDEX (PS\_OWNER IN VARCHAR2, PS\_TABLE\_NAME IN VARCHAR2, PS\_INDEX\_NAME IN VARCHAR2)

IS

VN\_COLUMN\_CNT INTEGER;

NULL\_CNT INTEGER;

USERE1 EXCEPTION;

USERE2 EXCEPTION;

USERE3 EXCEPTION;

FUNCTION COLUMN\_CNT(PS\_OWNER VARCHAR2, PS\_TABLE\_NAME VARCHAR2, PS\_INDEX\_NAME VARCHAR2)

RETURN INTEGER

IS

VN\_CNT INTEGER;

BEGIN

SELECT COUNT(\*) INTO VN\_CNT FROM DBA\_IND\_COLUMNS WHERE INDEX\_OWNER = PS\_OWNER AND INDEX\_NAME = PS\_INDEX\_NAME AND TABLE\_NAME = PS\_TABLE\_NAME;

RETURN VN\_CNT;

END COLUMN\_CNT;

PROCEDURE PRO\_CREATE\_INDEX2 (PS\_OWNER IN VARCHAR2, PS\_TABLE\_NAME IN VARCHAR2, PS\_INDEX\_NAME IN VARCHAR2, PN\_CNT IN INTEGER)

IS

CURSOR CS

IS

SELECT \* FROM

(

SELECT PS\_OWNER AS OWNER, 'INDEX' AS OBJECT\_TYPE, PS\_INDEX\_NAME AS OBJECT\_NAME, 1 AS LINE, 'CREATE UNIQUE INDEX '||PS\_OWNER||'.'||PS\_INDEX\_NAME AS TEXT FROM DUAL

UNION ALL

SELECT PS\_OWNER AS OWNER, 'INDEX' AS OBJECT\_TYPE, PS\_INDEX\_NAME AS OBJECT\_NAME, 2 AS LINE, 'ON '||PS\_OWNER||'.'||PS\_TABLE\_NAME AS TEXT FROM DUAL

UNION ALL

SELECT PS\_OWNER AS OWNER, 'INDEX' AS OBJECT\_TYPE, PS\_INDEX\_NAME AS OBJECT\_NAME, 3 AS LINE, '(' AS TEXT FROM DUAL

UNION ALL

SELECT PS\_OWNER AS OWNER, 'INDEX' AS OBJECT\_TYPE, PS\_INDEX\_NAME AS OBJECT\_NAME, COLUMN\_POSITION +3 AS LINE,

CASE WHEN PN\_CNT = 1 OR PN\_CNT = COLUMN\_POSITION THEN COLUMN\_NAME || ' ' || DESCEND

ELSE COLUMN\_NAME || ' ' || DESCEND || ','

END AS TEXT

FROM DBA\_IND\_COLUMNS WHERE INDEX\_OWNER = PS\_OWNER AND INDEX\_NAME =PS\_INDEX\_NAME

UNION ALL

SELECT PS\_OWNER AS OWNER, 'INDEX' AS OBJECT\_TYPE, PS\_INDEX\_NAME AS OBJECT\_NAME, PN\_CNT +4 AS LINE, ')' AS TEXT FROM DUAL

UNION ALL

SELECT PS\_OWNER AS OWNER, 'INDEX' AS OBJECT\_TYPE, PS\_INDEX\_NAME AS OBJECT\_NAME, PN\_CNT +5 AS LINE, 'TABLESPACE '|| A.TABLESPACE\_NAME ||';' AS TEXT FROM DUAL,

(SELECT TABLESPACE\_NAME FROM TABS WHERE TABLE\_NAME = PS\_TABLE\_NAME) A

)

ORDER BY OBJECT\_NAME, LINE;

VS\_OWNER VARCHAR2(100);

VS\_OBJECT\_TYPE VARCHAR2(100);

VS\_OBJECT\_NAME VARCHAR2(100);

VN\_LINE INTEGER;

VS\_TEXT VARCHAR2(100);

BEGIN

OPEN CS;

LOOP

FETCH CS INTO VS\_OWNER, VS\_OBJECT\_TYPE, VS\_OBJECT\_NAME, VN\_LINE, VS\_TEXT;

EXIT WHEN CS%NOTFOUND;

INSERT INTO DDL\_SCRIPTS VALUES(VS\_OWNER, VS\_OBJECT\_TYPE, VS\_OBJECT\_NAME, VN\_LINE, VS\_TEXT);

COMMIT;

END LOOP;

CLOSE CS;

END PRO\_CREATE\_INDEX2;

BEGIN

SELECT COUNT(\*) INTO NULL\_CNT FROM DBA\_IND\_COLUMNS WHERE INDEX\_OWNER = PS\_OWNER;

IF NULL\_CNT = 0 THEN

RAISE USERE1;

END IF;

SELECT COUNT(\*) INTO NULL\_CNT FROM DBA\_IND\_COLUMNS WHERE INDEX\_OWNER = PS\_OWNER AND TABLE\_NAME =PS\_TABLE\_NAME ;

IF NULL\_CNT = 0 THEN

RAISE USERE2;

END IF;

SELECT COUNT(\*) INTO NULL\_CNT FROM DBA\_IND\_COLUMNS WHERE INDEX\_OWNER = PS\_OWNER AND TABLE\_NAME =PS\_TABLE\_NAME AND INDEX\_NAME = PS\_INDEX\_NAME;

IF NULL\_CNT = 0 THEN

RAISE USERE3;

END IF;

VN\_COLUMN\_CNT := COLUMN\_CNT(PS\_OWNER, PS\_TABLE\_NAME, PS\_INDEX\_NAME);

PRO\_CREATE\_INDEX2(PS\_OWNER, PS\_TABLE\_NAME, PS\_INDEX\_NAME, VN\_COLUMN\_CNT);

EXCEPTION

WHEN USERE1 THEN

DBMS\_OUTPUT.PUT\_LINE(PS\_OWNER || '가 없습니다.');

WHEN USERE2 THEN

DBMS\_OUTPUT.PUT\_LINE(PS\_TABLE\_NAME || '가 없습니다.');

WHEN USERE3 THEN

DBMS\_OUTPUT.PUT\_LINE(PS\_INDEX\_NAME || '가 없습니다.');

END PRO\_CREATE\_INDEX;