

REPORT



과 목 :	데이터베이스이론및실습
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담당교수 :	권기현
학 과 :	정보통신공학과
학 번 :	201920479
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-- 10-1) DEPT 테이블을 복사해서 DEPT_TEMP 테이블 만들기

```
CREATE TABLE DEPT_TEMP AS SELECT * FROM DEPT;
```

Table DEPT_TEMP이(가) 생성되었습니다.

-- 10-2) DEPT_TEMP 테이블 전체 열 조회하기

```
SELECT * FROM DEPT_TEMP;
```

	DEPTNO	DNAME	LOC
1	10	ACCOUNTING	NEW YORK
2	20	RESEARCH	DALLAS
3	30	SALES	CHICAGO
4	40	OPERATIONS	BOSTON

-- 10-3) DEPT_TEMP 테이블에 데이터 추가하기

```
INSERT INTO DEPT_TEMP(DEPTNO, DNAME, LOC) VALUES (50, 'DATABASE', 'SEOUL');
```

```
SELECT * FROM DEPT_TEMP;
```

	DEPTNO	DNAME	LOC
1	10	ACCOUNTING	NEW YORK
2	20	RESEARCH	DALLAS
3	30	SALES	CHICAGO
4	40	OPERATIONS	BOSTON
5	50	DATABASE	SEOUL

-- 10-4) INSERT문에 열 지정 없이 데이터 추가하기

```
INSERT INTO DEPT_TEMP VALUES(60, 'NETWR0K', 'BUSAN');
```

```
SELECT * FROM DEPT_TEMP;
```

	DEPTNO	DNAME	LOC
1	10	ACCOUNTING	NEW YORK
2	20	RESEARCH	DALLAS
3	30	SALES	CHICAGO
4	40	OPERATIONS	BOSTON
5	50	DATABASE	SEOUL
6	60	NETWR0K	BUSAN

-- 10-5) NULL을 지정하여 입력하기

```
INSERT INTO DEPT_TEMP(DEPTNO, DNAME, LOC) VALUES(70, 'WEB', NULL);
```

```
SELECT * FROM DEPT_TEMP;
```

	DEPTNO	DNAME	LOC
1	10	ACCOUNTING	NEW YORK
2	20	RESEARCH	DALLAS
3	30	SALES	CHICAGO
4	40	OPERATIONS	BOSTON
5	50	DATABASE	SEOUL
6	60	NETWROK	BUSAN
7	70	WEB	(null)

-- 10-6) 빈 공백 문자열로 NULL을 입력하기

```
INSERT INTO DEPT_TEMP(DEPTNO, DNAME, LOC) VALUES(80, 'MOMILE', '');
```

```
SELECT * FROM DEPT_TEMP;
```

	DEPTNO	DNAME	LOC
1	10	ACCOUNTING	NEW YORK
2	20	RESEARCH	DALLAS
3	30	SALES	CHICAGO
4	40	OPERATIONS	BOSTON
5	50	DATABASE	SEOUL
6	60	NETWROK	BUSAN
7	70	WEB	(null)
8	80	MOMILE	(null)

-- 10-7) 열 데이터를 넣지 않는 방식으로 NULL 데이터 입력하기

```
INSERT INTO DEPT_TEMP(DEPTNO, LOC) VALUES(80, 'INCHEON');
```

```
SELECT * FROM DEPT_TEMP;
```

	DEPTNO	DNAME	LOC
2	20	RESEARCH	DALLAS
3	30	SALES	CHICAGO
4	40	OPERATIONS	BOSTON
5	50	DATABASE	SEOUL
6	60	NETWROK	BUSAN
7	70	WEB	(null)
8	80	MOMILE	(null)
9	80	(null)	INCHEON

-- 10-8) EMP 테이블을 복사해서 EMP_TEMP 테이블 만들기

```
CREATE TABLE EMP_TEMP AS SELECT * FROM EMP;
```

```
SELECT * FROM EMP_TEMP;
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
8	7788 SCOTT	ANALYST	7566	1982/12/09	3000	(null)	20
9	7839 KING	PRESIDENT	(null)	1981/11/17	5000	(null)	10
10	7844 TURNER	SALESMAN	7698	1981/09/08	1500	0	30
11	7876 ADAMS	CLERK	7788	1983/01/12	1100	(null)	20
12	7900 JAMES	CLERK	7698	1981/12/03	950	(null)	30
13	7902 FORD	ANALYST	7566	1981/12/03	3000	(null)	20
14	7934 MILLER	CLERK	7782	1982/01/23	1300	(null)	10

-- 10-9) INSERT문으로 날짜 데이터 입력하기(날짜 사이에 / 입력)

```
INSERT INTO EMP_TEMP(EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO)
```

```
VALUES(9999, '홍길동', 'PRESIDENT', NULL, '2001/01/01', 5000, 1000, 10);
```

```
SELECT * FROM EMP_TEMP;
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
9	7839 KING	PRESIDENT	(null)	1981/11/17	5000	(null)	10
10	7844 TURNER	SALESMAN	7698	1981/09/08	1500	0	30
11	7876 ADAMS	CLERK	7788	1983/01/12	1100	(null)	20
12	7900 JAMES	CLERK	7698	1981/12/03	950	(null)	30
13	7902 FORD	ANALYST	7566	1981/12/03	3000	(null)	20
14	7934 MILLER	CLERK	7782	1982/01/23	1300	(null)	10
15	9999 홍길동	PRESIDENT	(null)	2001/01/01	5000	1000	10

-- 10-10) INSERT문으로 날짜 데이터 입력하기(날짜 사이에 - 입력)

```
INSERT INTO EMP_TEMP(EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO)
```

```
VALUES(1111, '성춘향', 'MANAGER', 9999, '2001-01-15', 4000, NULL, 20);
```

```
SELECT * FROM EMP_TEMP;
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
10	7844 TURNER	SALESMAN	7698	1981/09/08	1500	0	30
11	7876 ADAMS	CLERK	7788	1983/01/12	1100	(null)	20
12	7900 JAMES	CLERK	7698	1981/12/03	950	(null)	30
13	7902 FORD	ANALYST	7566	1981/12/03	3000	(null)	20
14	7934 MILLER	CLERK	7782	1982/01/23	1300	(null)	10
15	9999 홍길동	PRESIDENT	(null)	2001/01/01	5000	1000	10
16	1111 성춘향	MANAGER	9999	2001/01/15	4000	(null)	20

-- 10-11) 날짜 데이터 형식을 반대로 했을 때

```
INSERT INTO EMP_TEMP(EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO)

VALUES(2111, '이순신', 'MANAGER', 9999, '07/01/2001', 4000, NULL, 20);
```

명령의 45 행에서 시작하는 중 오류 발생 -

```
INSERT INTO EMP_TEMP(EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO)
VALUES(2111, '이순신', 'MANAGER', 9999, '07/01/2001', 4000, NULL, 20)
```

오류 발생 명령행: 46 열: 51

오류 보고 -

SQL 오류: ORA-01830: 날짜 형식의 지정에 불필요한 데이터가 포함되어 있습니다

01830. 00000 - "date format picture ends before converting entire input string"

*Cause:

*Action:

-- 10-12) 날짜 데이터 형식을 반대로 했을 때

```
INSERT INTO EMP_TEMP(EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO)

VALUES(2111, '이순신', 'MANAGER', 9999, TO_DATE('07/01/2001', 'DD/MM/YYYY'), 4000,

NULL, 20);

SELECT * FROM EMP_TEMP;
```

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
11	7876	ADAMS	CLERK	7788	1983/01/12	1100	(null)	20
12	7900	JAMES	CLERK	7698	1981/12/03	950	(null)	30
13	7902	FORD	ANALYST	7566	1981/12/03	3000	(null)	20
14	7934	MILLER	CLERK	7782	1982/01/23	1300	(null)	10
15	9999	홍길동	PRESIDENT	(null)	2001/01/01	5000	1000	10
16	1111	성춘향	MANAGER	9999	2001/01/15	4000	(null)	20
17	2111	이순신	MANAGER	9999	2001/01/07	4000	(null)	20

-- 10-13) SYSDATE를 사용하여 날짜 데이터 입력하기

```
INSERT INTO EMP_TEMP (EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO)

VALUES(3111, '심청이', 'MANAGER', 9999, SYSDATE, 4000, NULL, 30);
```

SELECT * FROM EMP_TEMP;

	EM...	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
12	7900	JAMES	CLERK	7698	1981/12/03	950	(null)	30
13	7902	FORD	ANALYST	7566	1981/12/03	3000	(null)	20
14	7934	MILLER	CLERK	7782	1982/01/23	1300	(null)	10
15	9999	홍길동	PRESIDENT	(null)	2001/01/01	5000	1000	10
16	1111	성춘향	MANAGER	9999	2001/01/15	4000	(null)	20
17	2111	이순신	MANAGER	9999	2001/01/07	4000	(null)	20
18	3111	심청이	MANAGER	9999	2024/04/08	4000	(null)	30

-- 10-14) 서브쿼리로 여러 데이터 추가하기

```
INSERT INTO EMP_TEMP (EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO)

SELECT E.EMPNO, E.ENAME, E.JOB, E.MGR, E.HIREDATE, E.SAL, E.COMM, E.DEPTNO

FROM EMP E, SALGRADE S

WHERE E.SAL BETWEEN S.LOSAL AND S.HISAL

AND S.GRADE = 1;

SELECT * FROM EMP_TEMP;
```

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
15	9999	홍길동	PRESIDENT	(null)	2001/01/01	5000	1000	10
16	1111	성춘향	MANAGER	9999	2001/01/15	4000	(null)	20
17	2111	이순신	MANAGER	9999	2001/01/07	4000	(null)	20
18	3111	심청이	MANAGER	9999	2024/04/08	4000	(null)	30
19	7369	SMITH	CLERK	7902	1980/12/17	800	(null)	20
20	7876	ADAMS	CLERK	7788	1983/01/12	1100	(null)	20
21	7900	JAMES	CLERK	7698	1981/12/03	950	(null)	30

-- 10-15) DEPT 테이블을 복사해서 DEPT_TEMP2 테이블 만들기

```
CREATE TABLE DEPT_TEMP2 AS SELECT * FROM DEPT;

SELECT * FROM DEPT_TEMP2;
```

	DEPTNO	DNAME	LOC
1	10	ACCOUNTING	NEW YORK
2	20	RESEARCH	DALLAS
3	30	SALES	CHICAGO
4	40	OPERATIONS	BOSTON

-- 10-16) DEPT_TEMP2 테이블 업데이트하기

```
UPDATE DEPT_TEMP2 SET LOC = 'SEOUL';

SELECT * FROM DEPT_TEMP2;
```

	DEPTNO	DNAME	LOC
1	10	ACCOUNTING	SEOUL
2	20	RESEARCH	SEOUL
3	30	SALES	SEOUL
4	40	OPERATIONS	SEOUL

-- 10-17) ROLLBACK으로 테이블 내용을 이전 상태로 되돌리기

ROLLBACK;

	DEPTNO	DNAME	LOC
1	10	ACCOUNTING	NEW YORK
2	20	RESEARCH	DALLAS
3	30	SALES	CHICAGO
4	40	OPERATIONS	BOSTON

-- 10-18) 테이블 데이터 중 일부분만 수정하기

UPDATE DEPT_TEMP2 SET DNAME = 'DATABASE', LOC = 'SEOUL' WHERE DEPTNO = 40;

SELECT * FROM DEPT_TEMP2;

	DEPTNO	DNAME	LOC
1	10	ACCOUNTING	NEW YORK
2	20	RESEARCH	DALLAS
3	30	SALES	CHICAGO
4	40	DATABASE	SEOUL

-- 10-19) 서브쿼리로 데이터 일부분 수정하기

UPDATE DEPT_TEMP2 SET (DNAME, LOC) = (SELECT DNAME, LOC FROM DEPT WHERE DEPTNO = 40) WHERE DEPTNO = 40;

SELECT * FROM DEPT_TEMP2;

	DEPTNO	DNAME	LOC
1	10	ACCOUNTING	NEW YORK
2	20	RESEARCH	DALLAS
3	30	SALES	CHICAGO
4	40	OPERATIONS	BOSTON

-- 10-20) 서브쿼리로 데이터 일부분 수정하기

```
UPDATE DEPT_TEMP2 SET DNAME = (SELECT DNAME FROM DEPT WHERE DEPTNO = 40),
```

```
      LOC = (SELECT LOC FROM DEPT WHERE DEPTNO = 40)
```

```
WHERE DEPTNO = 40;
```

```
SELECT * FROM DEPT_TEMP2;
```

	DEPTNO	DNAME	LOC
1	10	ACCOUNTING	NEW YORK
2	20	RESEARCH	DALLAS
3	30	SALES	CHICAGO
4	40	OPERATIONS	BOSTON

-- 10-21) UPDATE문의 WHERE 절에 서브쿼리 사용하기

```
UPDATE DEPT_TEMP2 SET LOC = 'SEOUL' WHERE DEPTNO = (SELECT DEPTNO FROM DEPT_TEMP2
```

```
WHERE DNAME = 'OPERATIONS');
```

```
SELECT * FROM DEPT_TEMP2;
```

	DEPTNO	DNAME	LOC
1	10	ACCOUNTING	NEW YORK
2	20	RESEARCH	DALLAS
3	30	SALES	CHICAGO
4	40	OPERATIONS	SEOUL

-- 10-22) EMP테이블을 복사해서 EMP_TEMP2 테이블 만들기

```
CREATE TABLE EMP_TEMP2 AS SELECT * FROM EMP;
```

```
SELECT * FROM EMP_TEMP2;
```

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
8	7788	SCOTT	ANALYST	7566	1982/12/09	3000	(null)	20
9	7839	KING	PRESIDENT	(null)	1981/11/17	5000	(null)	10
10	7844	TURNER	SALESMAN	7698	1981/09/08	1500	0	30
11	7876	ADAMS	CLERK	7788	1983/01/12	1100	(null)	20
12	7900	JAMES	CLERK	7698	1981/12/03	950	(null)	30
13	7902	FORD	ANALYST	7566	1981/12/03	3000	(null)	20
14	7934	MILLER	CLERK	7782	1982/01/23	1300	(null)	10

-- 10-23 WHERE 절을 사용하여 데이터 일부분만 삭제하기

```
DELETE FROM EMP_TEMP2 WHERE JOB = 'MANAGER';
```

```
SELECT * FROM EMP_TEMP2;
```

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
5	7788	SCOTT	ANALYST	7566	1982/12/09	3000	(null)	20
6	7839	KING	PRESIDENT	(null)	1981/11/17	5000	(null)	10
7	7844	TURNER	SALESMAN	7698	1981/09/08	1500	0	30
8	7876	ADAMS	CLERK	7788	1983/01/12	1100	(null)	20
9	7900	JAMES	CLERK	7698	1981/12/03	950	(null)	30
10	7902	FORD	ANALYST	7566	1981/12/03	3000	(null)	20
11	7934	MILLER	CLERK	7782	1982/01/23	1300	(null)	10

-- 10-24) WHERE절에 서브쿼리를 사용하여 데이터 일부만 삭제하기

```
DELETE FROM EMP_TEMP2 WHERE EMPNO IN (SELECT E.EMPNO FROM EMP_TEMP2 E, SALGRADE
S
```

```
WHERE E.SAL BETWEEN S.LOSAL AND S.HISAL
```

```
AND S.GRADE = 3 AND DEPTNO =30);
```

```
SELECT * FROM EMP_TEMP2;
```

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
3	7654	MARTIN	SALESMAN	7698	1981/09/28	1250	1400	30
4	7788	SCOTT	ANALYST	7566	1982/12/09	3000	(null)	20
5	7839	KING	PRESIDENT	(null)	1981/11/17	5000	(null)	10
6	7876	ADAMS	CLERK	7788	1983/01/12	1100	(null)	20
7	7900	JAMES	CLERK	7698	1981/12/03	950	(null)	30
8	7902	FORD	ANALYST	7566	1981/12/03	3000	(null)	20
9	7934	MILLER	CLERK	7782	1982/01/23	1300	(null)	10

-- 10-25) 테이블에 있는 전체 데이터 삭제하기

```
DELETE FROM EMP_TEMP2;
```

```
SELECT * FROM EMP_TEMP2;
```

EMPNO	ENAME	JOB	MGR	HIRED...	SAL	COMM	DEPTNO
-------	-------	-----	-----	----------	-----	------	--------