

데이터베이스시스템 과제 #6

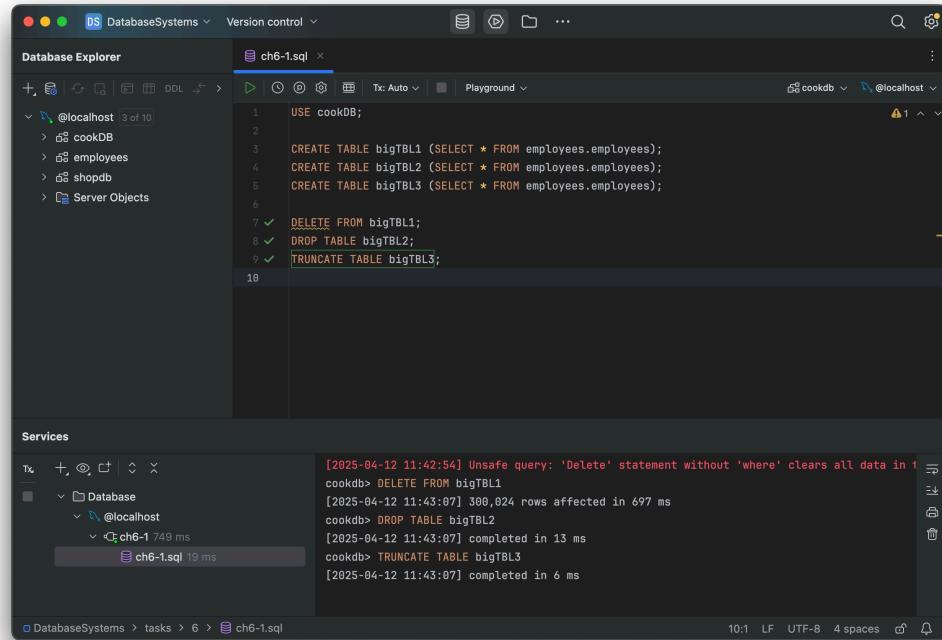
박종현, 2025-04-12

공과대학 컴퓨터정보통신공학과

과제 목표

1. 실습자료 6 수행 후 캡쳐 제출

[실습 6-1]



```

USE cookDB;
CREATE TABLE bigTBL1 (SELECT * FROM employees.employees);
CREATE TABLE bigTBL2 (SELECT * FROM employees.employees);
CREATE TABLE bigTBL3 (SELECT * FROM employees.employees);
DELETE FROM bigTBL1;
DROP TABLE bigTBL2;
TRUNCATE TABLE bigTBL3;

```

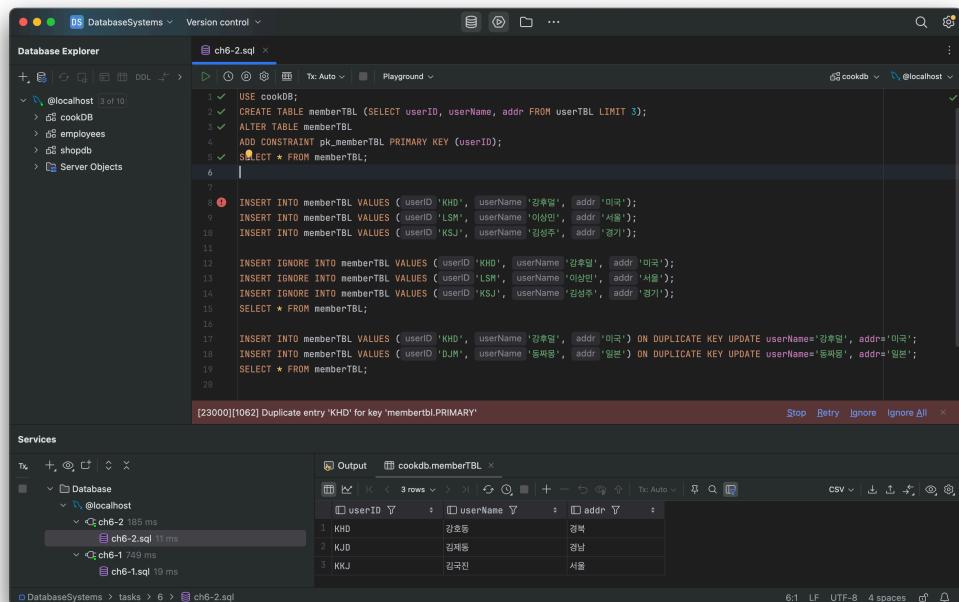
Services

```

[2025-04-12 11:42:54] Unsafe query: 'Delete' statement without 'where' clears all data in 1 cookdb> DELETE FROM bigTBL1
[2025-04-12 11:43:07] 300,024 rows affected in 697 ms
cookdb> DROP TABLE bigTBL2
[2025-04-12 11:43:07] completed in 13 ms
cookdb> TRUNCATE TABLE bigTBL3
[2025-04-12 11:43:07] completed in 6 ms

```

[실습 6-2]



```

USE cookDB;
CREATE TABLE memberTBL (SELECT userID, userName, addr FROM userTBL LIMIT 3);
ALTER TABLE memberTBL
ADD CONSTRAINT pk_memberTBL PRIMARY KEY (userID);
SELECT * FROM memberTBL;

INSERT INTO memberTBL VALUES (userID 'KHD', userName '강호동', addr '미국');
INSERT INTO memberTBL VALUES (userID 'LSK', userName '이상민', addr '서울');
INSERT INTO memberTBL VALUES (userID 'KSJ', userName '김상주', addr '경기');

INSERT IGNORE INTO memberTBL VALUES (userID 'KHD', userName '강호달', addr '미국');
INSERT IGNORE INTO memberTBL VALUES (userID 'LSK', userName '이안민', addr '서울');
INSERT IGNORE INTO memberTBL VALUES (userID 'KSJ', userName '김상주', addr '경기');

SELECT * FROM memberTBL;

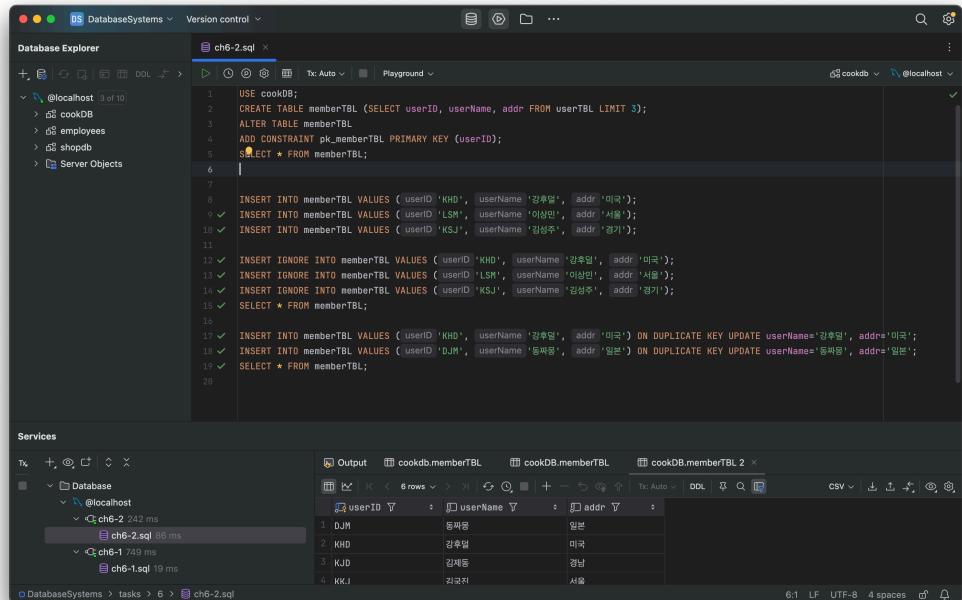
INSERT INTO memberTBL VALUES (userID 'KHD', userName '강호달', addr '미국') ON DUPLICATE KEY UPDATE userName='강호달', addr='미국';
INSERT INTO memberTBL VALUES (userID 'DJH', userName '동복옹', addr '일본') ON DUPLICATE KEY UPDATE userName='동복옹', addr='일본';
SELECT * FROM memberTBL;

```

Services

[23000][1062] Duplicate entry 'KHD' for key 'membertbl.PRIMARY'

userID	userName	addr
KHD	강호동	경북
KJD	김제동	경남
KKJ	김국진	서울



```

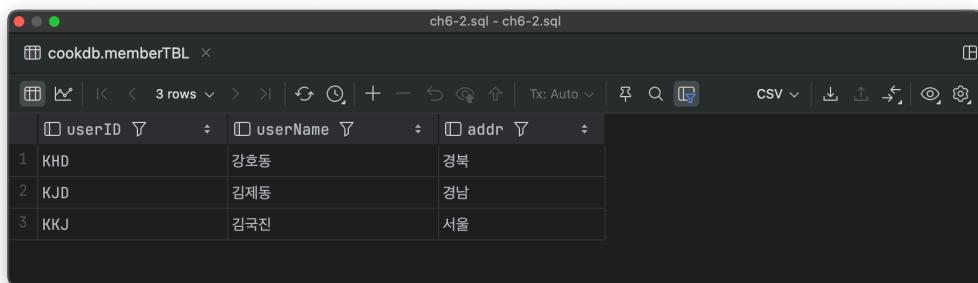
USE cookDB;
CREATE TABLE memberTBL (SELECT userID, userName, addr FROM userTBL LIMIT 5);
ALTER TABLE memberTBL
ADD CONSTRAINT pk_memberTBL PRIMARY KEY (userID);
SELECT * FROM memberTBL;

INSERT INTO memberTBL VALUES (userID 'KHD', userName '강호동', addr '미국');
INSERT INTO memberTBL VALUES (userID 'LSM', userName '이상민', addr '서울');
INSERT INTO memberTBL VALUES (userID 'KSJ', userName '김성주', addr '경기');

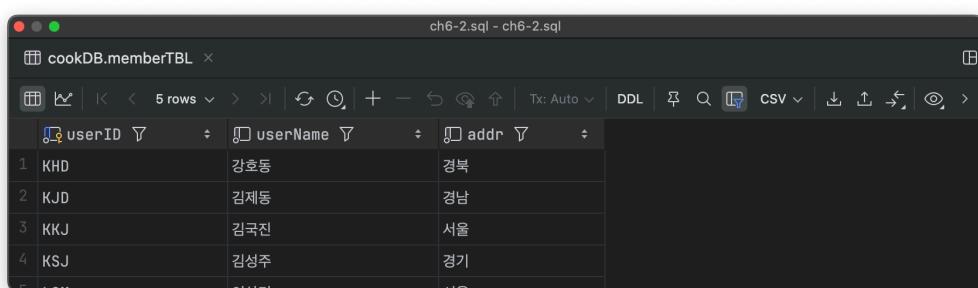
INSERT IGNORE INTO memberTBL VALUES (userID 'KHD', userName '강호철', addr '미국');
INSERT IGNORE INTO memberTBL VALUES (userID 'LSM', userName '이상민', addr '서울');
INSERT IGNORE INTO memberTBL VALUES (userID 'KSJ', userName '김성주', addr '경기');

SELECT * FROM memberTBL;

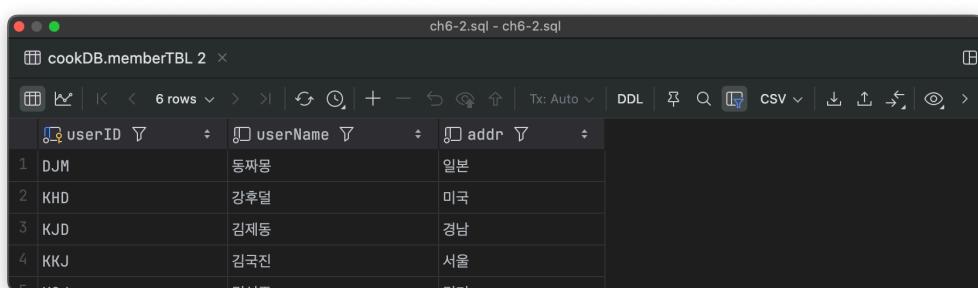
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userID	userName	addr
1 KHD	강호동	경북
2 KJD	김제동	경남
3 KKJ	김국진	서울



userID	userName	addr
1 KHD	강호동	경북
2 KJD	김제동	경남
3 KKJ	김국진	서울
4 KSJ	김성주	경기



userID	userName	addr
1 DJM	동짜동	일본
2 KHD	강호철	미국
3 KJD	김제동	경남
4 KKJ	김국진	서울
5 KSJ	김성주	경기

[실습 6-3]

```

USE cookDB;
SELECT ROW_NUMBER() OVER(ORDER BY height DESC) "키준순위", userName, addr, height FROM userTBL;
SELECT ROW_NUMBER() OVER(ORDER BY height DESC, userName ASC) "키준순위", userName, addr, height FROM userTBL;
SELECT addr, ROW_NUMBER() OVER(PARTITION BY addr ORDER BY height DESC, userName ASC) "지역 별키준순위", userName, height FROM userTBL;
SELECT DENSE_RANK() OVER(ORDER BY height DESC) "키준순위", userName, addr, height FROM userTBL;
SELECT RANK() OVER(ORDER BY height DESC) "키준순위", userName, addr, height FROM userTBL;
SELECT NTILE(2) OVER(ORDER BY height DESC) "반번호", userName, addr, height FROM userTBL;
SELECT NTILE(4) OVER(ORDER BY height DESC) "반번호", userName, addr, height FROM userTBL;

```

	키준순위	userName	addr	height
1	1	박수홍	서울	183
2	2	강호동	경북	182
3	3	이휘재	경기	180
4	4	남희석	충남	180

	키준순위	userName	addr	height
1	1	박수홍	서울	183
2	2	강호동	경북	182
3	3	남희석	충남	180
4	4	이휘재	경기	180

	addr	지역 별키준순위	userName	height
1	경기		1 이휘재	180
2	경기		2 신동엽	176
3	경남		1 김제동	173
4	경남		2 이경규	170

ch6-3.sql - ch6-3.sql

Result 1-5

	키준순위	userName	addr	height
1	1	박수홍	서울	183
2	2	강호동	경북	182
3	3	이휘재	경기	180
4	3	남희석	충남	180

ch6-3.sql - ch6-3.sql

Result 1-6

	키준순위	userName	addr	height
1	1	박수홍	서울	183
2	2	강호동	경북	182
3	3	이휘재	경기	180
4	3	남희석	충남	180

ch6-3.sql - ch6-3.sql

Result 1-7

	반번호	userName	addr	height
1	1	박수홍	서울	183
2	1	강호동	경북	182
3	1	이휘재	경기	180
4	1	남희석	충남	180

ch6-3.sql - ch6-3.sql

Result 1-8

	반번호	userName	addr	height
1	1	박수홍	서울	183
2	1	강호동	경북	182
3	1	이휘재	경기	180
4	2	남희석	충남	180

[실습 6-4]

```

USE cookDB;
SELECT userName, addr, height AS "키",
       height - (LEAD(height, 1, 0) OVER (ORDER BY height DESC)) AS "다음 사람과 키 차이"
  FROM userTBL;
SELECT addr, userName, height AS "키",
       height - (FIRST_VALUE(height) OVER (PARTITION BY addr ORDER BY height DESC)) AS "지역별 최대키와 차이"
  FROM userTBL;
SELECT addr, userName, height AS "키",
       (CUME_DIST() OVER (PARTITION BY addr ORDER BY height DESC)) * 100 AS "누적인원 백분율%"
  FROM userTBL;

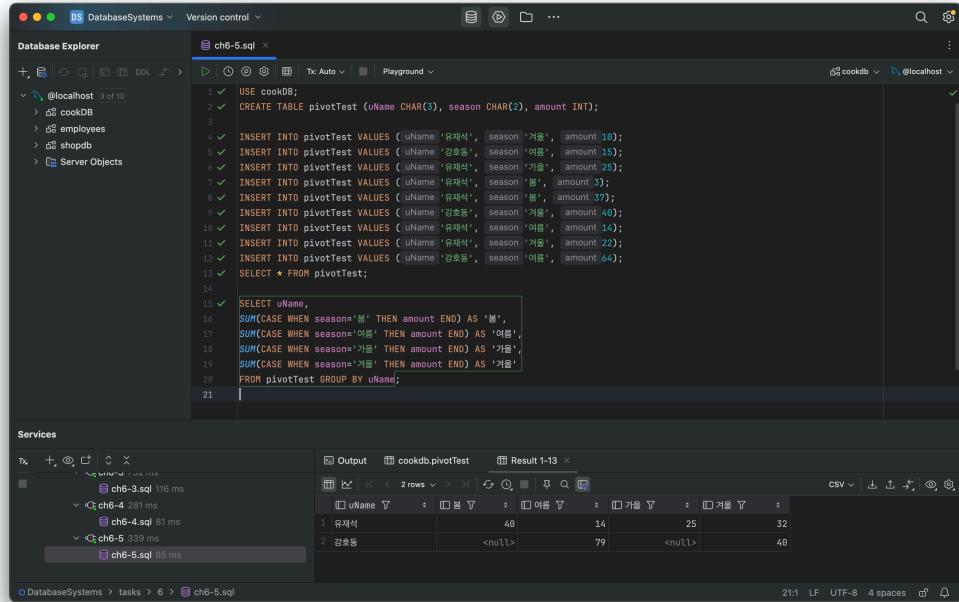
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	userName	addr	키	'다음 사람과 키 차이'
1	박수홍	서울	183	1
2	강호동	경북	182	2
3	이휘재	경기	180	0
4	남희석	충남	180	2

	addr	userName	키	'지역별 최대키와 차이'
1	경기	이휘재	180	0
2	경기	신동엽	176	-4
3	경남	김제동	173	0
4	경남	이경규	170	-3

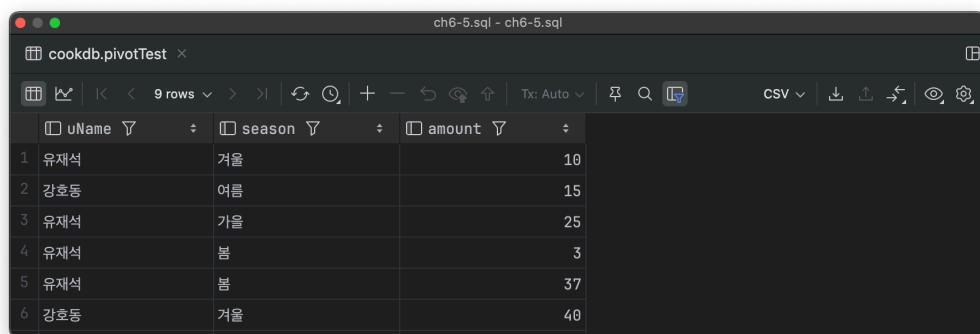
	addr	userName	키	'누적인원 백분율%'
1	경기	이휘재	180	50
2	경기	신동엽	176	100
3	경남	김제동	173	50
4	경남	이경규	170	100

[실습 6-5]

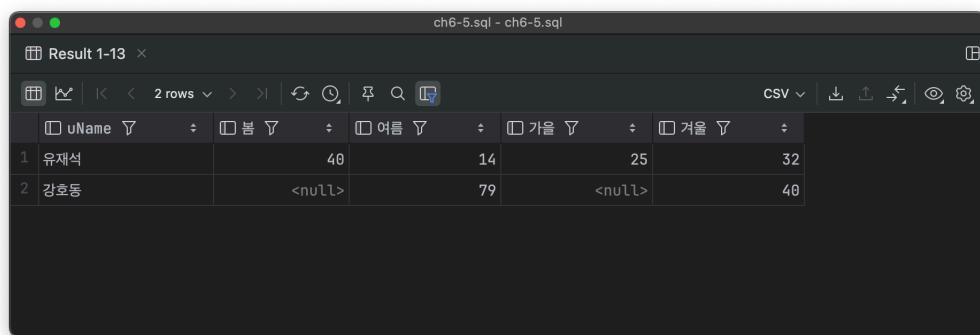


```

USE cookDB;
CREATE TABLE pivotTest (uName CHAR(5), season CHAR(2), amount INT);
INSERT INTO pivotTest VALUES ('유재석', '겨울', 10);
INSERT INTO pivotTest VALUES ('강호동', '여름', 15);
INSERT INTO pivotTest VALUES ('유재석', '겨울', 25);
INSERT INTO pivotTest VALUES ('유재석', '봄', 3);
INSERT INTO pivotTest VALUES ('유재석', '봄', 37);
INSERT INTO pivotTest VALUES ('강호동', '겨울', 40);
INSERT INTO pivotTest VALUES ('유재석', '여름', 14);
INSERT INTO pivotTest VALUES ('유재석', '겨울', 22);
INSERT INTO pivotTest VALUES ('강호동', '여름', 64);
SELECT * FROM pivotTest;
SELECT uName,
       SUM(CASE WHEN season='봄' THEN amount END) AS '봄',
       SUM(CASE WHEN season='여름' THEN amount END) AS '여름',
       SUM(CASE WHEN season='겨울' THEN amount END) AS '겨울',
       SUM(CASE WHEN season='봄' THEN amount END) AS '겨울'
  FROM pivotTest GROUP BY uName;
  
```



	uName	season	amount
1	유재석	겨울	10
2	강호동	여름	15
3	유재석	겨울	25
4	유재석	봄	3
5	유재석	봄	37
6	강호동	겨울	40



	uName	봄	여름	겨울	겨울
1	유재석	40	14	25	32
2	강호동	<null>	79	<null>	40