

데이터베이스시스템 과제 #2

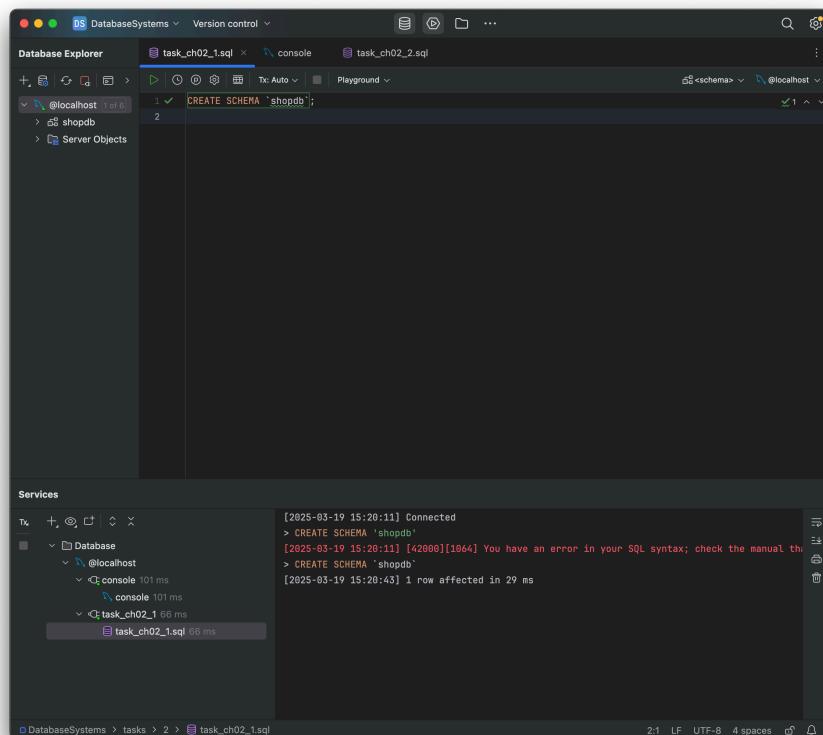
박종현, 2025-03-19

공과대학 컴퓨터정보통신공학과

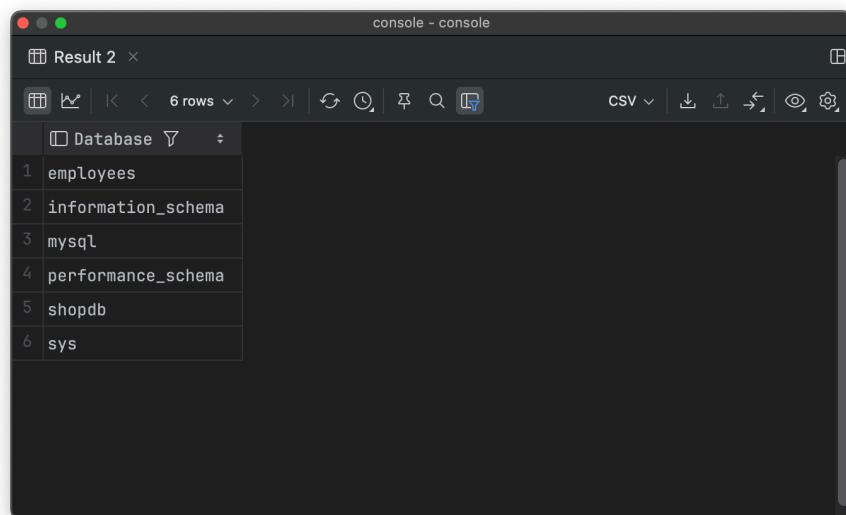
과제 목표

1. 실습자료 2 수행 후 캡쳐 제출

[실습 2-1]



The screenshot shows the Database Explorer interface. In the center, a SQL editor window titled 'task_ch02_1.sql' is open, showing the command: `CREATE SCHEMA `shopdb`;`. The 'Services' panel on the left shows a connection to 'localhost' with a database named 'shopdb'. The bottom status bar indicates the connection was established at 2025-03-19 15:20:11.



The screenshot shows the 'Result 2' window. The title bar says 'console - console'. The main area displays a table with the following data:

Database
employees
information_schema
mysql
performance_schema
shopdb
sys

[실습 2-2]

```

CREATE TABLE `shopdb`.`membertbl` (
  `memberID` CHAR(8) NOT NULL PRIMARY KEY,
  `memberName` CHAR(5) NOT NULL,
  `memberAddress` CHAR(20) NULL
);

CREATE TABLE `shopdb`.`producttbl` (
  `productName` CHAR(4) NOT NULL PRIMARY KEY,
  `cost` INT NOT NULL,
  `makeDate` DATE,
  `company` CHAR(5),
  `amount` INT NOT NULL
);

```

Field	Type	Null	Key	Default
memberID	char(8)	NO	PRI	<null>
memberName	char(5)	NO		<null>
memberAddress	char(20)	YES		<null>

Field	Type	Null	Key	Default
productName	char(4)	NO	PRI	<null>
cost	int	NO		<null>
makeDate	date	YES		<null>
company	char(5)	YES		<null>
amount	int	NO		<null>

[실습 2-3]

```

Database Explorer
+ @localhost 1 of 6
  > shopdb
  > Server Objects

task_ch02_1.sql  console  task_ch02_3.sql  task_ch02_2.sql
1 # Insert Member Data
2
3 INSERT INTO shopdb.membertbl (memberID, memberName, memberAddress)
4 VALUES( memberID 'Thomas', memberName '토마스', memberAddress '경기 부천시 중동');
5
6 INSERT INTO shopdb.membertbl (memberID, memberName, memberAddress)
7 VALUES( memberID 'Edward', memberName '에드워드', memberAddress '서울 은평구 중산동');
8
9 INSERT INTO shopdb.membertbl (memberID, memberName, memberAddress)
10 VALUES( memberID 'Henry', memberName '헨리', memberAddress '인천 남구 주안동');
11
12 INSERT INTO shopdb.membertbl (memberID, memberName, memberAddress)
13 VALUES( memberID 'Gorden', memberName '고든', memberAddress '경기 성남시 분당구');
14
15 # Insert Product Data
16 INSERT INTO shopdb.producttbl (productName, cost, makeDate, company, amount)
17 VALUES( productName '냉장고', cost 10, makeDate '2019-07-01', company '삼성', amount 17)
18
19 INSERT INTO shopdb.producttbl (productName, cost, makeDate, company, amount)
20 VALUES( productName '컴퓨터', cost 20, makeDate '2020-03-01', company 'LG', amount 3)
21
22 ✓ INSERT INTO shopdb.producttbl (productName, cost, makeDate, company, amount)
23 VALUES( productName '모니터', cost 5, makeDate '2021-09-01', company '롯데', amount 2)
24
25

Services
Tx +, @, D, X
Database
  @localhost
    console 164 ms
    console 85 ms
    task_ch02_3 33 ms
      task_ch02_3.sql 33 ms
    task_ch02_2 97 ms
      task_ch02_2.sql 30 ms
    task_ch02_1 66 ms
      task_ch02_1.sql 66 ms

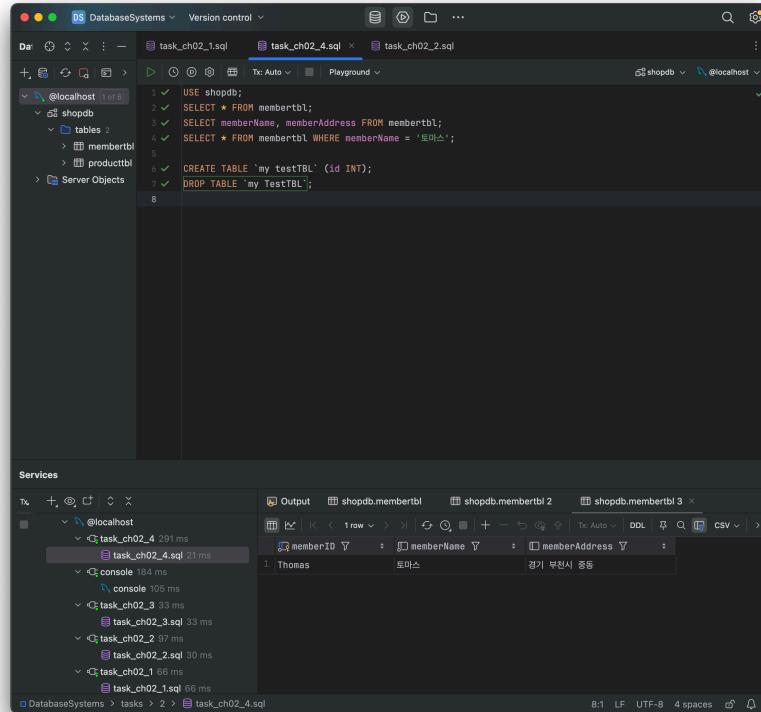
shopdb> INSERT INTO shopdb.producttbl (productName, cost, makeDate, company, amount)
VALUES('냉장고', 10, '2019-07-01', '삼성', 17)
[2025-03-19 15:35:04] [22001][1292] Data truncation: Incorrect date value
shopdb> INSERT INTO shopdb.producttbl (productName, cost, makeDate, company, amount)
VALUES('냉장고', 10, '2019-07-01', '삼성', 17)
[2025-03-19 15:35:24] 1 row affected in 6 ms
shopdb> INSERT INTO shopdb.producttbl (productName, cost, makeDate, company, amount)
VALUES('컴퓨터', 20, '2020-03-01', 'LG', 3)
[2025-03-19 15:35:28] 1 row affected in 3 ms
shopdb> INSERT INTO shopdb.producttbl (productName, cost, makeDate, company, amount)
VALUES('모니터', 5, '2021-09-01', '롯데', 22)
[2025-03-19 15:35:31] 1 row affected in 3 ms

```

	memberID	memberName	memberAddress
1	Edward	에드워드	서울 은평구 중산동
2	Gorden	고든	경기 성남시 분당구
3	Henry	헨리	인천 남구 주안동
4	Thomas	토마스	경기 부천시 중동

	productName	cost	makeDate	company
1	냉장고	10	2019-07-01	삼성
2	모니터	5	2021-09-01	롯데
3	컴퓨터	20	2020-03-01	LG

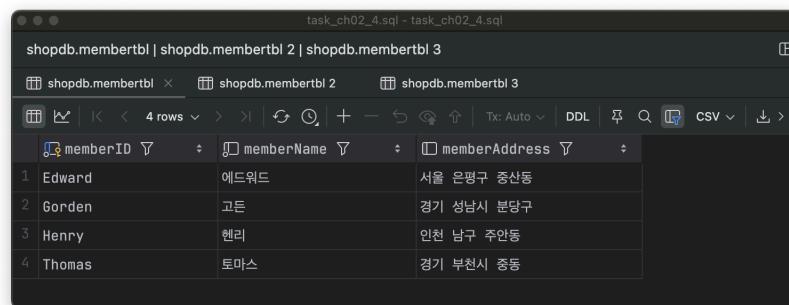
[실습 2-4]



```

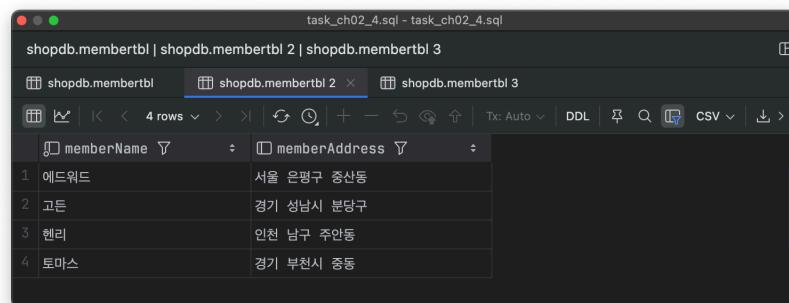
USE shopdb;
SELECT * FROM membertbl;
SELECT memberName, memberAddress FROM membertbl;
SELECT * FROM membertbl WHERE memberName = '토마스';
CREATE TABLE 'my testTBL' (id INT);
DROP TABLE 'my TestTBL';

```



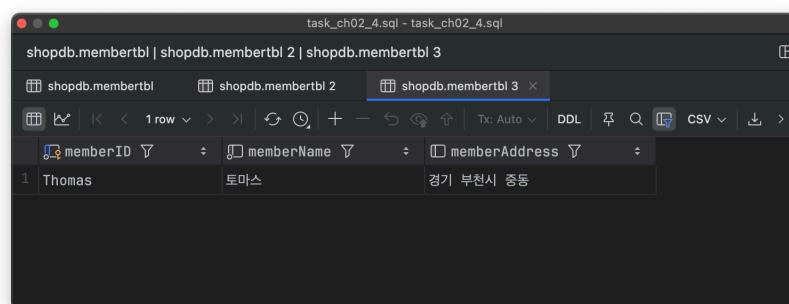
shopdb.membertbl | shopdb.membertbl 2 | shopdb.membertbl 3

	memberID	memberName	memberAddress
1	Edward	에드워드	서울 은평구 증산동
2	Gorden	고든	경기 성남시 분당구
3	Henry	헨리	인천 남구 주안동
4	Thomas	토마스	경기 부천시 중동



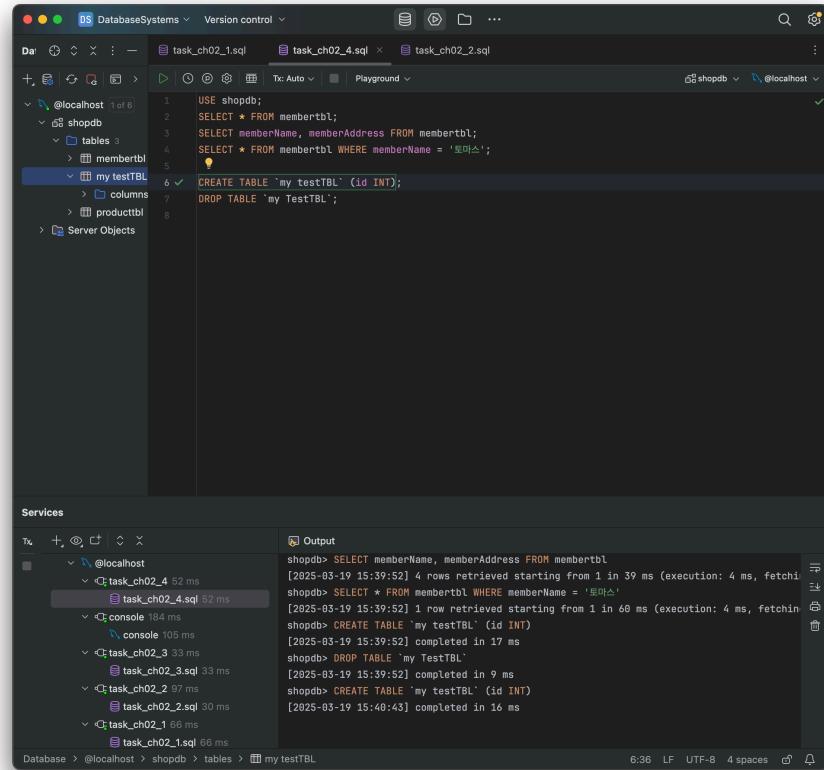
shopdb.membertbl | shopdb.membertbl 2 | shopdb.membertbl 3

	memberName	memberAddress
1	에드워드	서울 은평구 증산동
2	고든	경기 성남시 분당구
3	헨리	인천 남구 주안동
4	토마스	경기 부천시 중동



shopdb.membertbl | shopdb.membertbl 2 | shopdb.membertbl 3

	memberID	memberName	memberAddress
1	Thomas	토마스	경기 부천시 중동



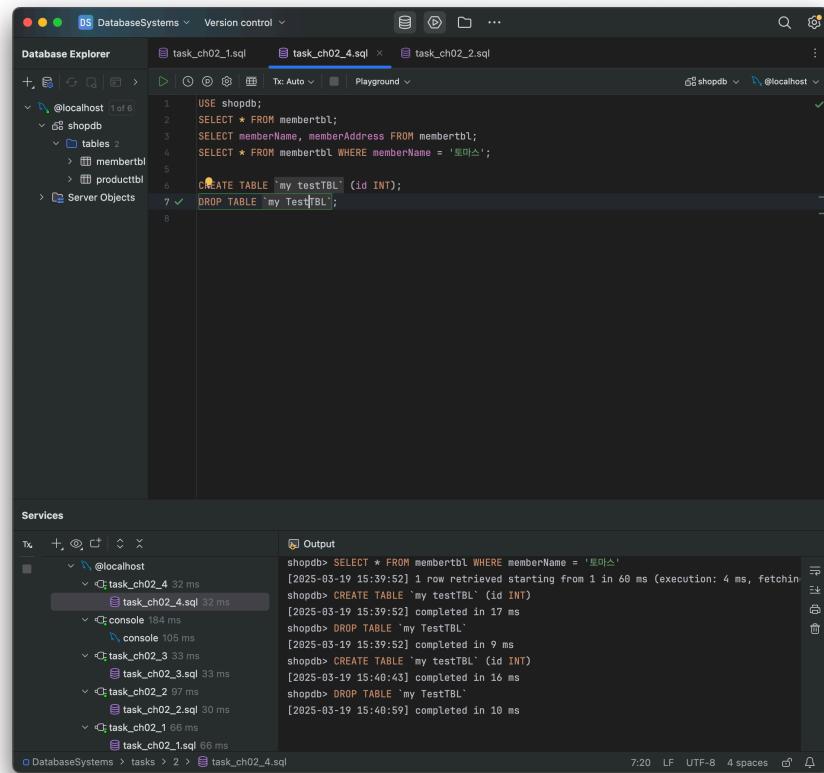
The screenshot shows the Database Systems IDE interface. The left sidebar displays the database structure for the 'shopdb' database, including the 'membertbl' table. The main area shows the following SQL code:

```

1 USE shopdb;
2 SELECT * FROM membertbl;
3 SELECT memberName, memberAddress FROM membertbl;
4 SELECT * FROM membertbl WHERE memberName = '토마스';
5
6 CREATE TABLE `my testTBL` (id INT);
7 DROP TABLE `my TestTBL`;
8

```

The 'Output' panel at the bottom shows the results of the executed SQL statements. The 'Services' panel on the right lists various database connections and their execution times.



The screenshot shows the Database Systems IDE interface. The left sidebar displays the database structure for the 'shopdb' database, including the 'membertbl' table. The main area shows the following SQL code:

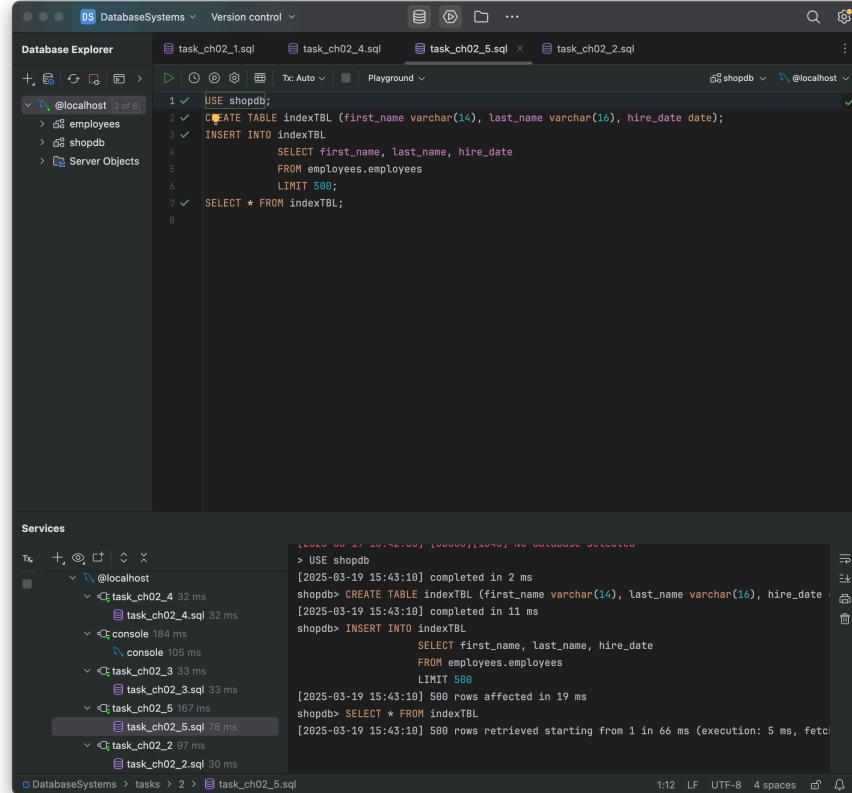
```

1 USE shopdb;
2 SELECT * FROM membertbl;
3 SELECT memberName, memberAddress FROM membertbl;
4 SELECT * FROM membertbl WHERE memberName = '토마스';
5
6 CREATE TABLE `my testTBL` (id INT);
7 DROP TABLE `my TestTBL`;
8

```

The 'Output' panel at the bottom shows the results of the executed SQL statements. The 'Services' panel on the right lists various database connections and their execution times.

[실습 2-5]



```

1 ✓ USE shopdb;
2 ✓ CREATE TABLE indexTBL (first_name varchar(14), last_name varchar(16), hire_date date);
3 ✓ INSERT INTO indexTBL
4     SELECT first_name, last_name, hire_date
5         FROM employees.employees
6         LIMIT 500;
7 ✓ SELECT * FROM indexTBL;
8

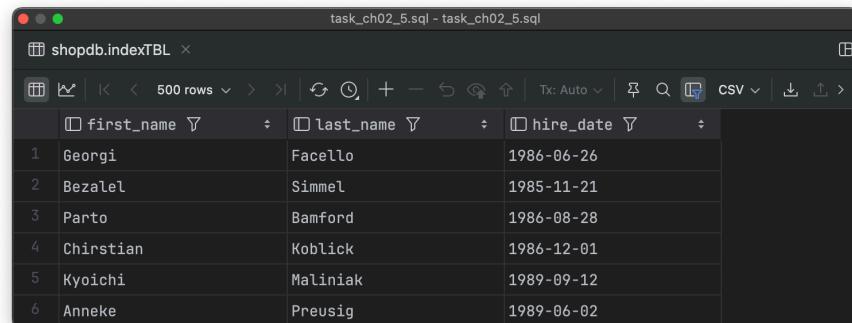
```

Services

```

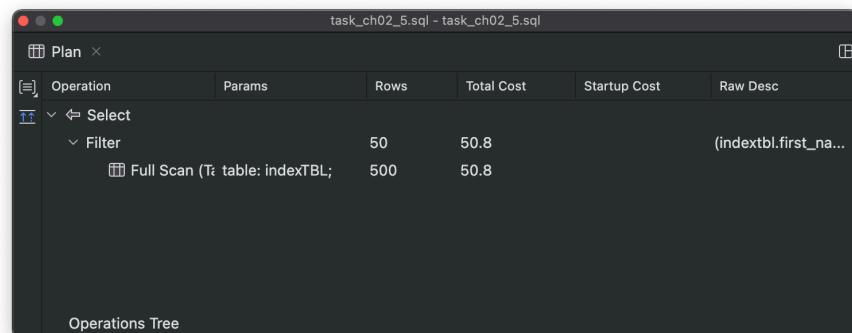
USE shopdb
[2025-03-19 15:43:10] completed in 2 ms
shopdb> CREATE TABLE indexTBL (first_name varchar(14), last_name varchar(16), hire_date date)
[2025-03-19 15:43:10] completed in 11 ms
shopdb> INSERT INTO indexTBL
    SELECT first_name, last_name, hire_date
    FROM employees.employees
    LIMIT 500
[2025-03-19 15:43:10] 500 rows affected in 19 ms
shopdb> SELECT * FROM indexTBL
[2025-03-19 15:43:10] 500 rows retrieved starting from 1 in 66 ms (execution: 5 ms, fetch: 61 ms)

```



task_ch02_5.sql - task_ch02_5.sql

	first_name	last_name	hire_date
1	Georgi	Facello	1986-06-26
2	Bezalel	Simmel	1985-11-21
3	Porto	Bamford	1986-08-28
4	Chirstian	Koblick	1986-12-01
5	Kyoichi	Maliniak	1989-09-12
6	Anneke	Preusig	1989-06-02



task_ch02_5.sql - task_ch02_5.sql

Plan

Operation	Params	Rows	Total Cost	Startup Cost	Raw Desc
Select		50	50.8		(indextbl.first_na...
Filter		500	50.8		
Full Scan (T: table: indexTBL;)					

Operations Tree

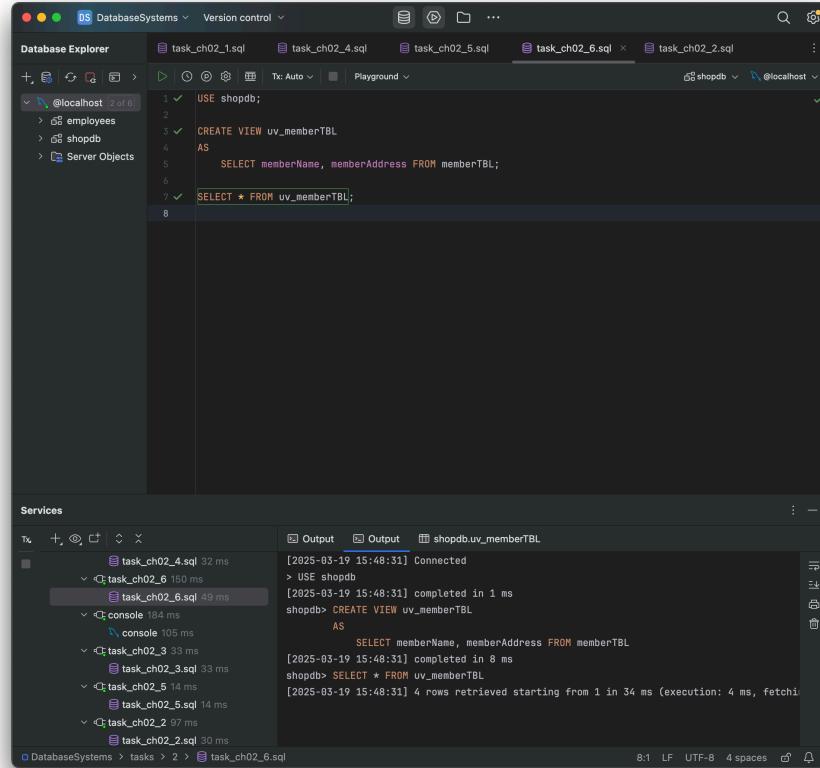
```

USE shopdb;
CREATE TABLE indexTBL (first_name varchar(14), last_name varchar(16), hire_date date);
INSERT INTO indexTBL
SELECT first_name, last_name, hire_date
FROM employees.employees
LIMIT 500;
SELECT * FROM indexTBL;
CREATE INDEX idx_indexTBL_firstname ON indexTBL(first_name);
SELECT * FROM indexTBL WHERE first_name = 'Mary';

```

Session					
Plan	Plan	Operation	Params	Rows	Total Cost
		Unique table: indexTBL; index: idx_indexTBL_firstname		1	0.35
				(first_name =...	

[실습 2-6]

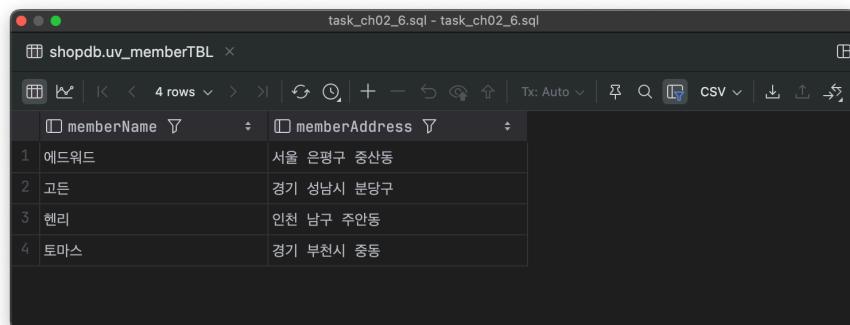


The screenshot shows a DBMS interface with the following details:

- Database Explorer:** Shows a connection to `@localhost` with 2 of 6 databases: `employees` and `shopdb`. The `Server Objects` node is expanded.
- Query Editor:** Contains the following SQL code:


```

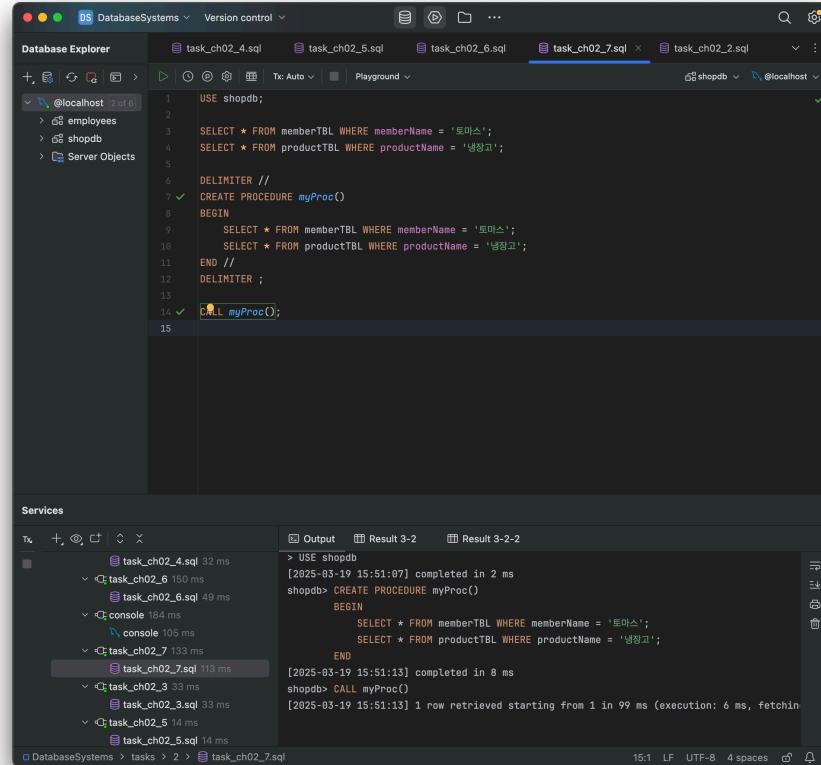
1 ✓ USE shopdb;
2
3 ✓ CREATE VIEW uv_memberTBL
4   AS
5     SELECT memberName, memberAddress FROM memberTBL;
6
7 ✓ SELECT * FROM uv_memberTBL;
8
      
```
- Services:** Shows a list of transactions and their execution times:
 - `task_ch02_4.sql`: 32 ms
 - `task_ch02_6`: 160 ms
 - `task_ch02_6.sql`: 49 ms
 - `console`: 184 ms
 - `task_ch02_3`: 33 ms
 - `task_ch02_3.sql`: 33 ms
 - `task_ch02_5`: 14 ms
 - `task_ch02_5.sql`: 14 ms
 - `task_ch02_2`: 97 ms
 - `task_ch02_2.sql`: 30 ms
- Output:** Displays the results of the `CREATE VIEW` and `SELECT` statements.



The screenshot shows the results of the `CREATE VIEW` and `SELECT` statements in a table format:

	memberName	memberAddress
1	에드워드	서울 은평구 중산동
2	고든	경기 성남시 분당구
3	헨리	인천 남구 주안동
4	토마스	경기 부천시 중동

[실습 2-7]

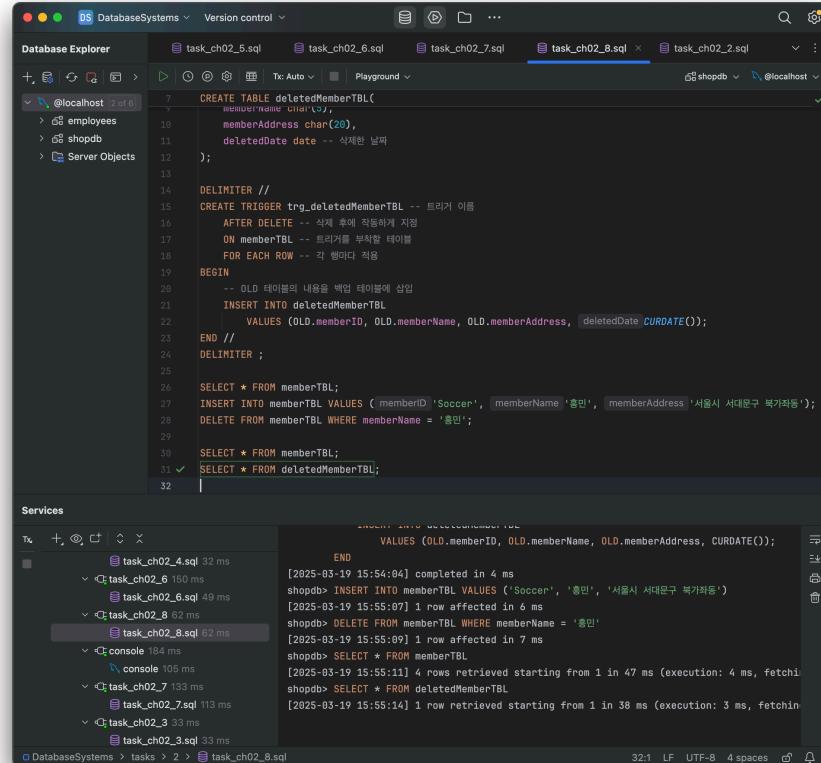


The screenshot shows a DBMS interface with the following code in the query editor:

```

1 USE shopdb;
2
3 SELECT * FROM memberTBL WHERE memberName = '토마스';
4
5 SELECT * FROM productTBL WHERE productName = '냉장고';
6
7 DELIMITER //
8
9 CREATE PROCEDURE myProc()
10 BEGIN
11     SELECT * FROM memberTBL WHERE memberName = '토마스';
12     SELECT * FROM productTBL WHERE productName = '냉장고';
13
14 END //
15
16 DELIMITER ;
17
18 CALL myProc();
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[실습 2-8]



```

CREATE TABLE deletedMemberTBL(
    memberName char(20),
    memberAddress char(20),
    deletedDate date -- 삭제한 날짜
);

DELIMITER //
CREATE TRIGGER trg_deletedMemberTBL -- 트리거 이름
    AFTER DELETE -- 삭제 후에 작동하게 지정
    ON memberTBL -- 트리거를 부착할 테이블
    FOR EACH ROW -- 각 행마다 적용
BEGIN
    -- OLD 테이블의 내용을 백업 테이블에 삽입
    INSERT INTO deletedMemberTBL
    VALUES (OLD.memberID, OLD.memberName, OLD.memberAddress, deletedDate CURDATE());
END //
DELIMITER ;

SELECT * FROM memberTBL;
INSERT INTO memberTBL VALUES ('Soccer', '홍민', '서울시 서대문구 북가좌동');
DELETE FROM memberTBL WHERE memberName = '홍민';

SELECT * FROM memberTBL;
SELECT * FROM deletedMemberTBL;

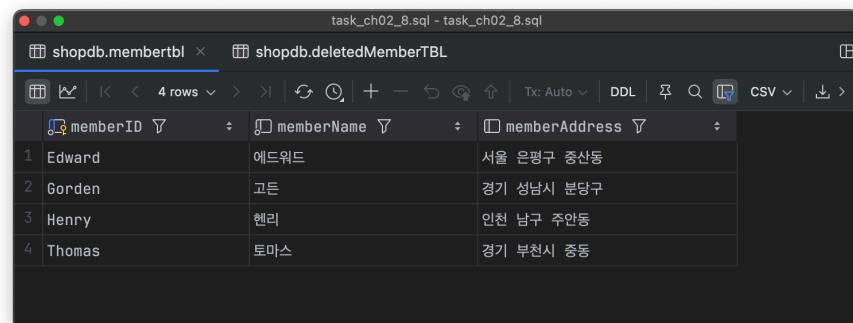
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Services

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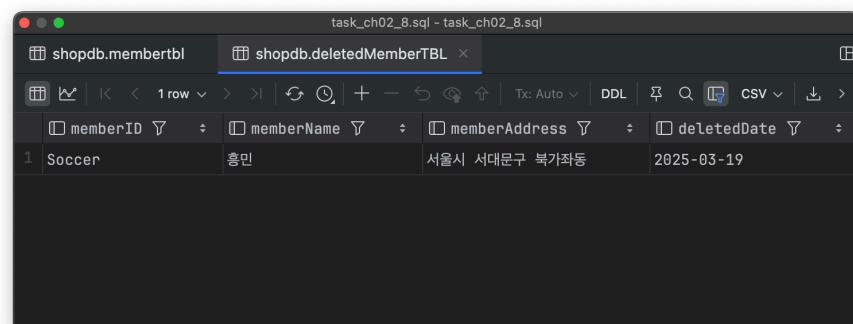
[2025-03-19 15:54:04] completed in 4 ms
shopdb> INSERT INTO memberTBL VALUES ('Soccer', '홍민', '서울시 서대문구 북가좌동')
[2025-03-19 15:55:07] 1 row affected in 6 ms
shopdb> DELETE FROM memberTBL WHERE memberName = '홍민'
[2025-03-19 15:55:09] 1 row affected in 7 ms
shopdb> SELECT * FROM memberTBL
[2025-03-19 15:55:11] 4 rows retrieved starting from 1 in 47 ms (execution: 4 ms, fetchin
shopdb> SELECT * FROM deletedMemberTBL
[2025-03-19 15:55:14] 1 row retrieved starting from 1 in 38 ms (execution: 3 ms, fetchin

```



task_ch02_8.sql - task_ch02_8.sql

	memberID	memberName	memberAddress
1	Edward	에드워드	서울 은평구 중산동
2	Gorden	고든	경기 성남시 분당구
3	Henry	헨리	인천 남구 주안동
4	Thomas	토마스	경기 부천시 중동



task_ch02_8.sql - task_ch02_8.sql

	memberID	memberName	memberAddress	deletedDate
1	Soccer	홍민	서울시 서대문구 북가좌동	2025-03-19