분산시스템 과제 #1

박종현, 2025-03-19
공과대학 컴퓨터정보통신공학과

과제 목표

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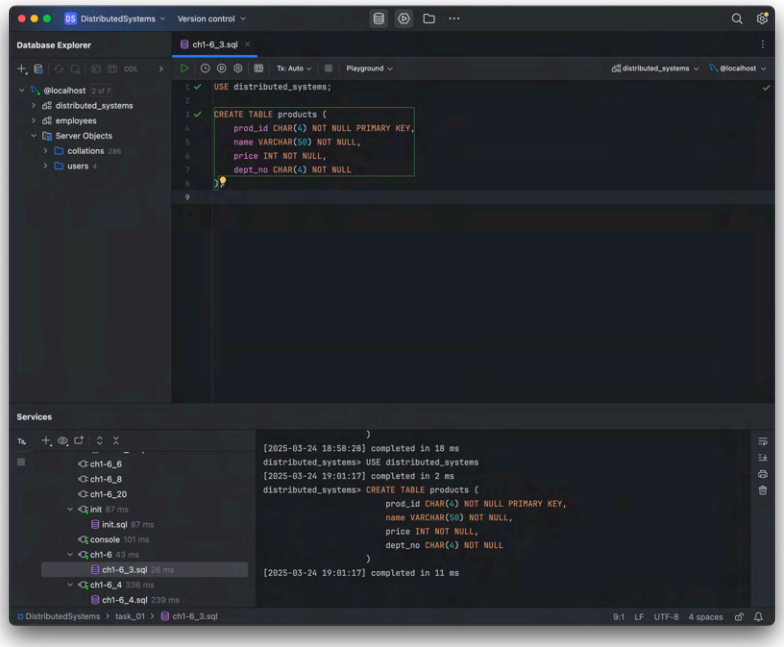
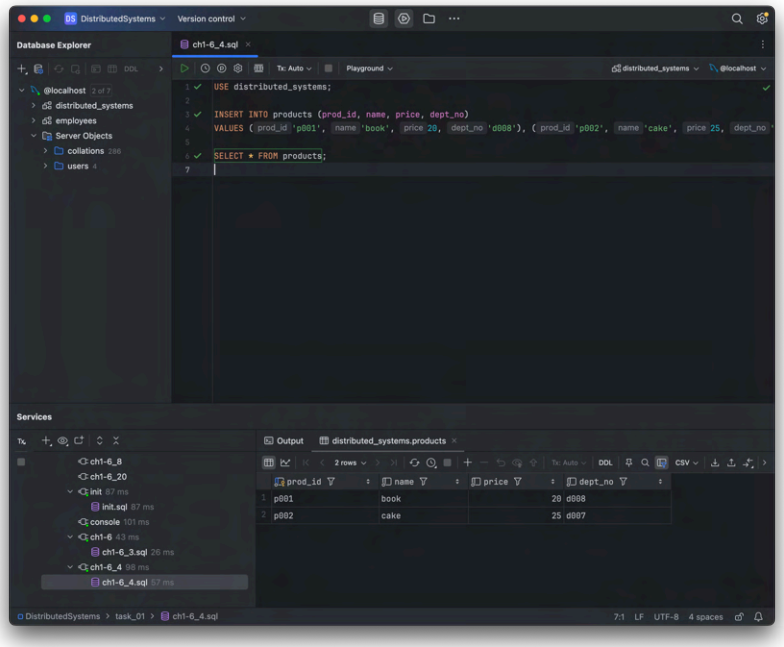
2. 1-7 자료 : 4, 8, 9, 12 쪽
3. 1-8 자료 : 8, 9, 12, 13, 14 쪽

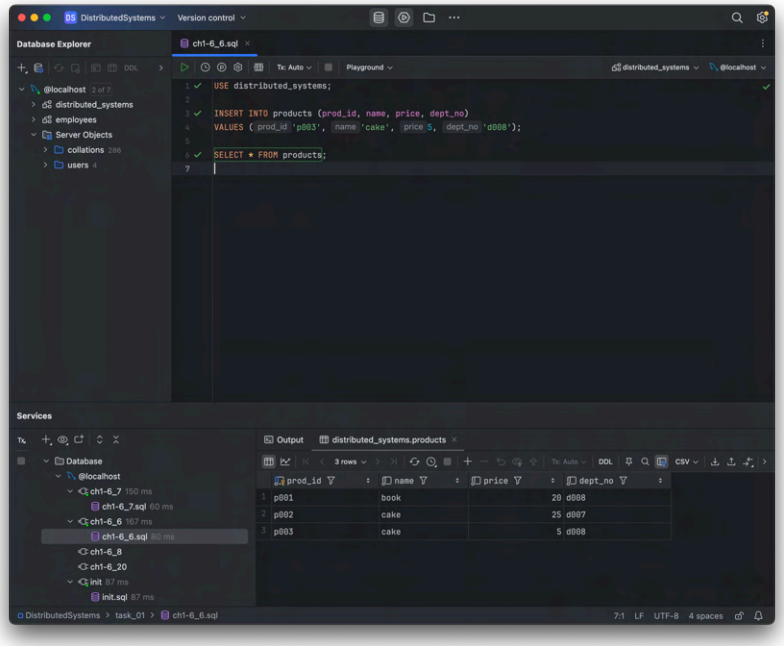
[1-6, #3]



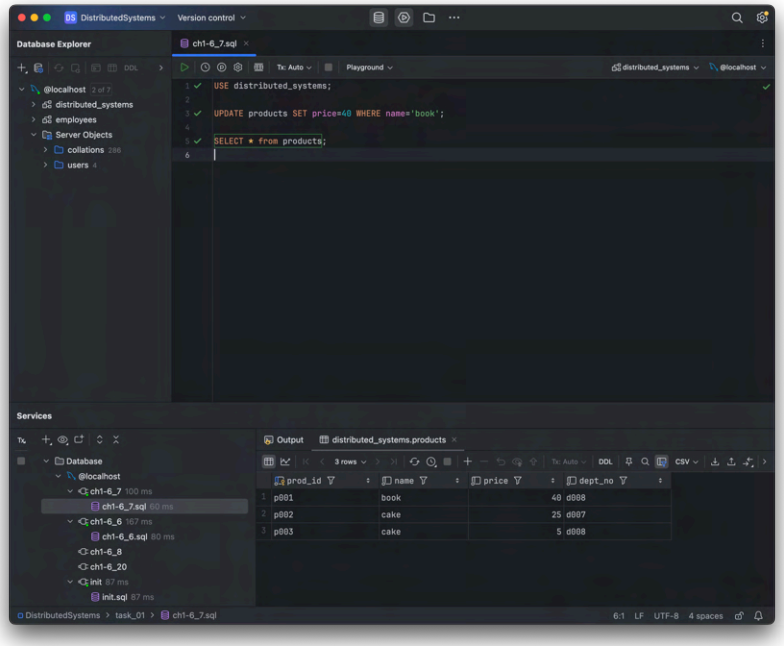
[1-6, #4]



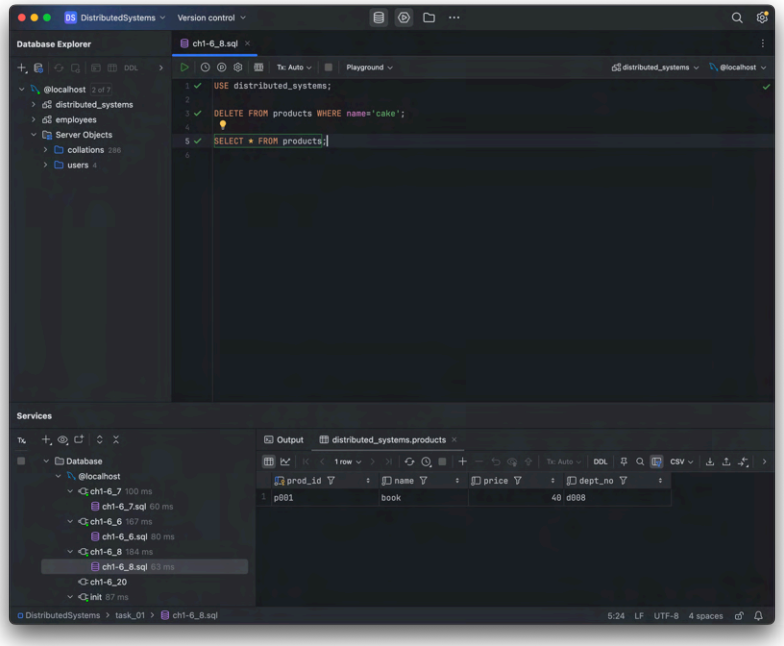
[1-6, #6]


DistributedSystems
Version control
Database Explorer
ch1-6_6.sql
USE distributed_systems;
INSERT INTO products (prod_id, name, price, dept_no)
VALUES ('p003', 'cake', 5, 'd008');
SELECT * FROM products;
Services
Output
distributed_systems.products
prod_id name price dept_no
p001 book 20 d008
p002 cake 25 d007
p003 cake 5 d008

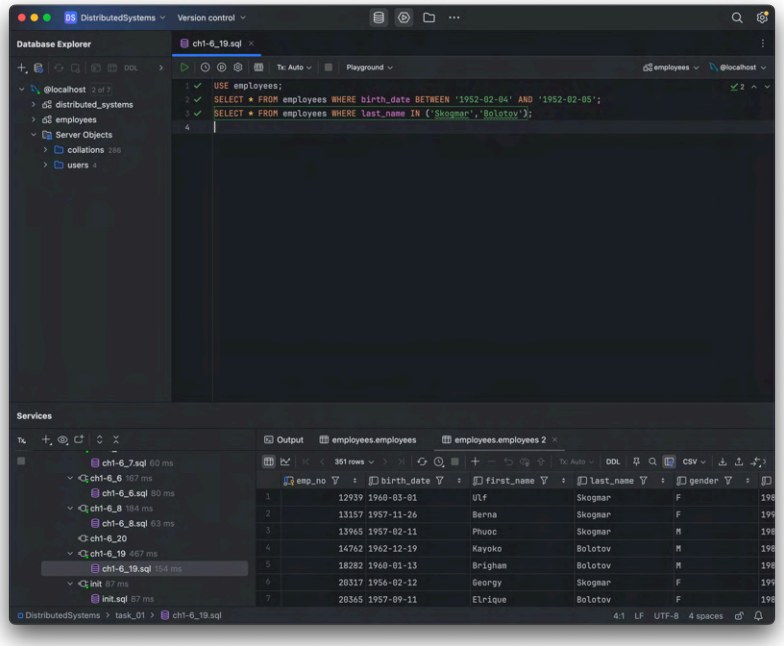
[1-6, #7]


DistributedSystems
Version control
Database Explorer
ch1-6_7.sql
USE distributed_systems;
UPDATE products SET price=40 WHERE name='book';
SELECT * from products;
Services
Output
distributed_systems.products
prod_id name price dept_no
p001 book 40 d008
p002 cake 25 d007
p003 cake 5 d008

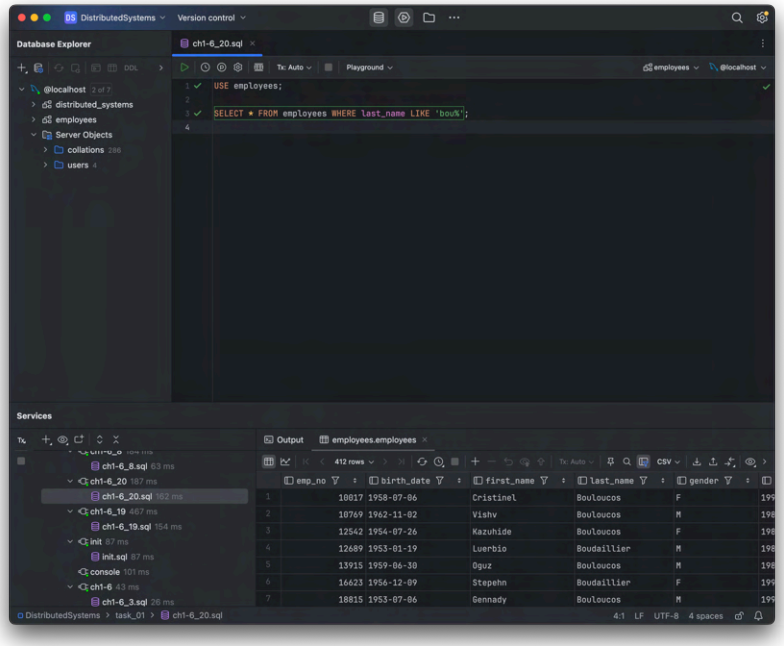
[1-6, #8]


DistributedSystems
Version control
Database Explorer
ch1-6_8.sql
USE distributed_systems;
DELETE FROM products WHERE name='cake';
SELECT * FROM products;
Services
Output
distributed_systems.products
prod_id
name
price
dept_no
p001
book
40
d008

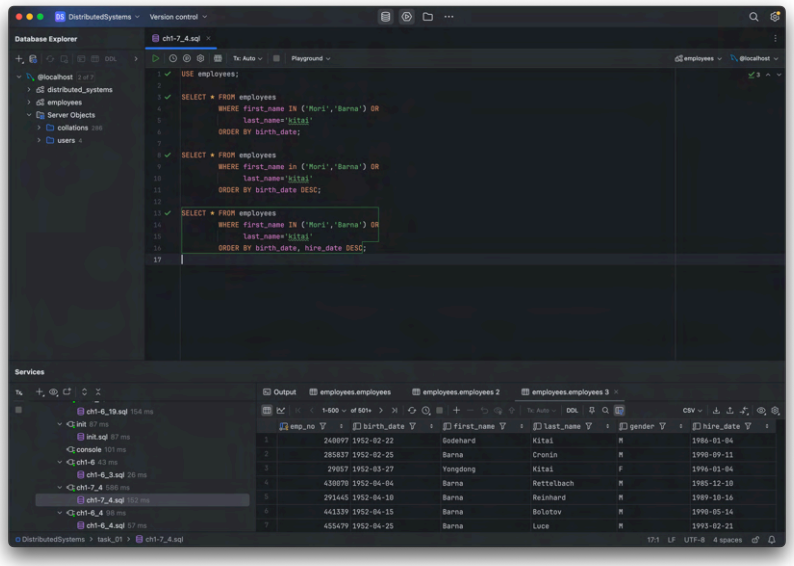
[1-6, #19]

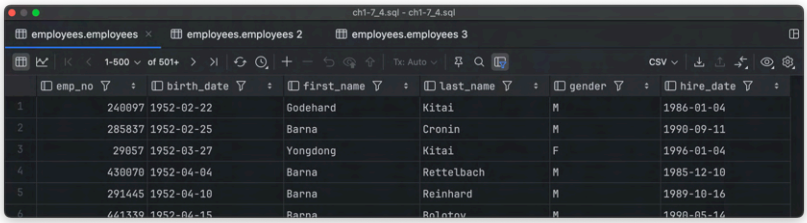

DistributedSystems
Version control
Database Explorer
ch1-6_19.sql
USE employees;
SELECT * FROM employees WHERE birth_date BETWEEN '1952-02-04' AND '1952-02-05';
SELECT * FROM employees WHERE last_name IN ('Skogmar','Bolotov');
Services
Output
employees.employees
employees.employees 2
emp_no
birth_date
first_name
last_name
gender
12939 1960-03-01 Ulf Skogmar F
13157 1957-11-26 Berna Skogmar F
13965 1957-02-11 Phuoc Skogmar M
14762 1962-12-19 Kayoko Bolotov M
18282 1960-01-13 Brigham Bolotov M
20317 1956-02-12 Georgy Skogmar F
20365 1957-09-11 Elrique Bolotov F

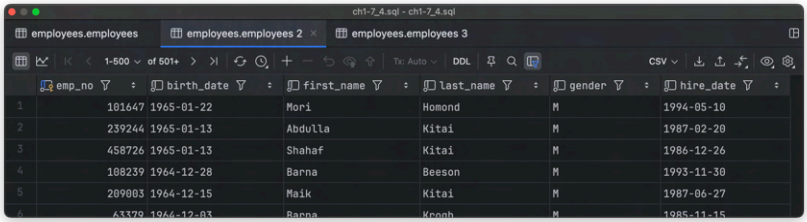
[1-6, #20]

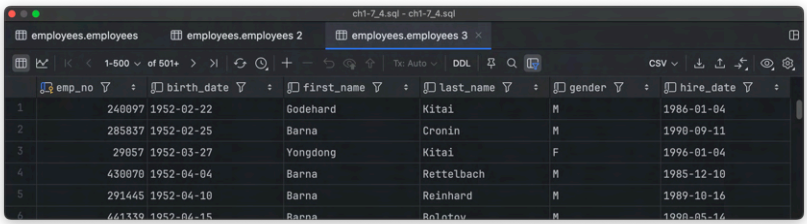

DistributedSystems
Version control
Database Explorer
ch1-6_20.sql
USE employees;
SELECT * FROM employees WHERE last_name LIKE 'bou%';
Services
Output
employees.employees
emp_no birth_date first_name last_name gender
10017 1958-07-06 Cristinel Bouloucos F
10769 1962-11-02 Vishv Bouloucos M
12542 1954-07-26 Kazuhide Bouloucos F
12689 1953-01-19 Luerbio Boudaillier M
13915 1959-06-30 Oguz Bouloucos M
16623 1956-12-09 Stepehn Boudaillier F
18815 1953-07-06 Gennady Bouloucos M

[1-7, #4]

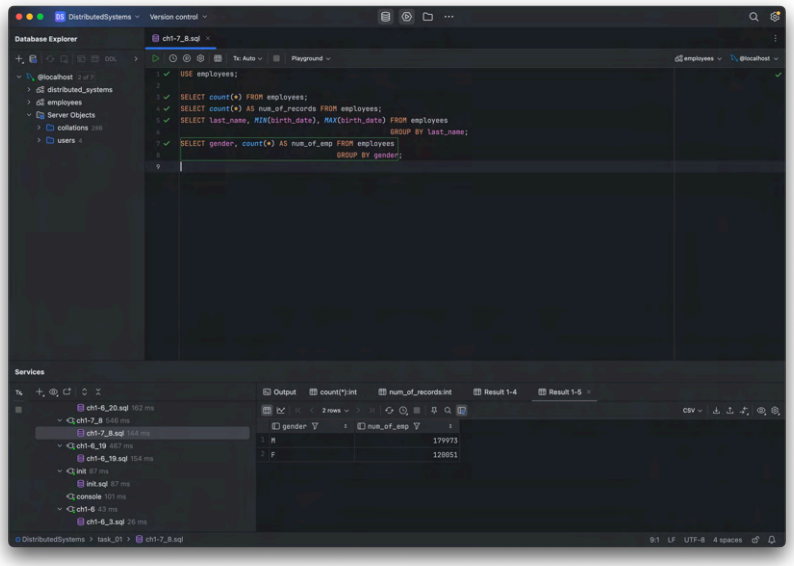

DistributedSystems
Version control
Database Explorer
ch1-7_4.sql
Playground
@localhost
distributed_systems
employees
Server Objects
collations
users
USE employees;
SELECT * FROM employees
WHERE first_name IN ('Mori','Barna') OR
last_name='kitai'
ORDER BY birth_date;
SELECT * FROM employees
WHERE first_name in ('Mori','Barna') OR
last_name='kitai'
ORDER BY birth_date DESC;
SELECT * FROM employees
WHERE first_name IN ('Mori','Barna') OR
last_name='kitai'
ORDER BY birth_date, hire_date DESC;
Services
Output
employees.employees
employees.employees 2
employees.employees 3
emp_no birth_date first_name last_name gender hire_date
240097 1952-02-22 Godehard Kitai M 1986-01-04
285837 1952-02-25 Barna Cronin M 1990-09-11
29057 1952-03-27 Yongdong Kitai F 1996-01-04
430070 1952-04-04 Barna Rettelbach M 1985-12-10
291445 1952-04-10 Barna Reinhard M 1989-10-16
441339 1952-04-15 Barna Bolotov M 1990-05-14
455479 1952-04-25 Barna Luce M 1993-02-21

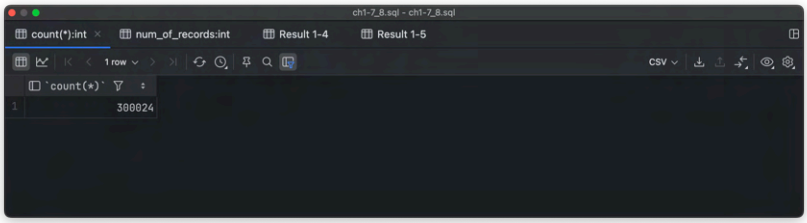

ch1-7_4.sql - ch1-7_4.sql
employees.employees
employees.employees 2
employees.employees 3
1-500 of 501+
Tx: Auto
CSV
emp_no birth_date first_name last_name gender hire_date
240097 1952-02-22 Godehard Kitai M 1986-01-04
285837 1952-02-25 Barna Cronin M 1990-09-11
29057 1952-03-27 Yongdong Kitai F 1996-01-04
430070 1952-04-04 Barna Rettelbach M 1985-12-10
291445 1952-04-10 Barna Reinhard M 1989-10-16

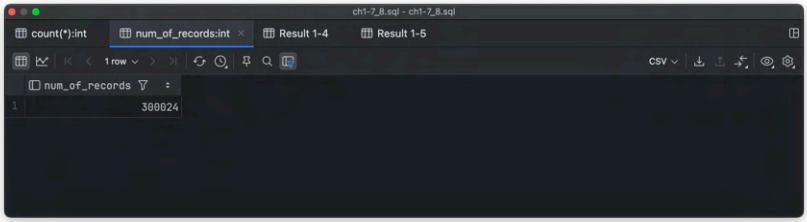

ch1-7_4.sql - ch1-7_4.sql
employees.employees
employees.employees 2
employees.employees 3
1-500 of 501+
Tx: Auto
DDL
CSV
emp_no birth_date first_name last_name gender hire_date
101647 1965-01-22 Mori Homond M 1994-05-10
239244 1965-01-13 Abdulla Kitai M 1987-02-20
458726 1965-01-13 Shahaf Kitai M 1986-12-26
108239 1964-12-28 Barna Beeson M 1993-11-30
209003 1964-12-15 Maik Kitai M 1987-06-27


ch1-7_4.sql - ch1-7_4.sql
employees.employees
employees.employees 2
employees.employees 3
1-500 of 501+
Tx: Auto
DDL
CSV
emp_no birth_date first_name last_name gender hire_date
240097 1952-02-22 Godehard Kitai M 1986-01-04
285837 1952-02-25 Barna Cronin M 1990-09-11
29057 1952-03-27 Yongdong Kitai F 1996-01-04
430070 1952-04-04 Barna Rettelbach M 1985-12-10
291445 1952-04-10 Barna Reinhard M 1989-10-16

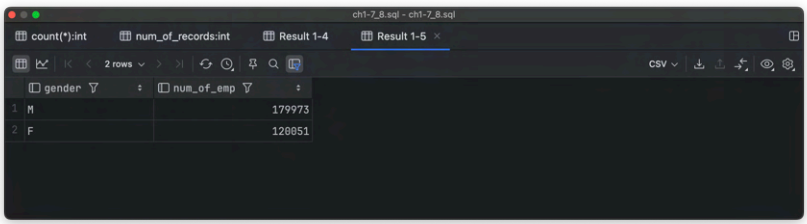
[1-7, #8]


USE employees;
SELECT count(*) FROM employees;
SELECT count(*) AS num_of_records FROM employees;
SELECT last_name, MIN(birth_date), MAX(birth_date) FROM employees
GROUP BY last_name;
SELECT gender, count(*) AS num_of_emp FROM employees
GROUP BY gender;

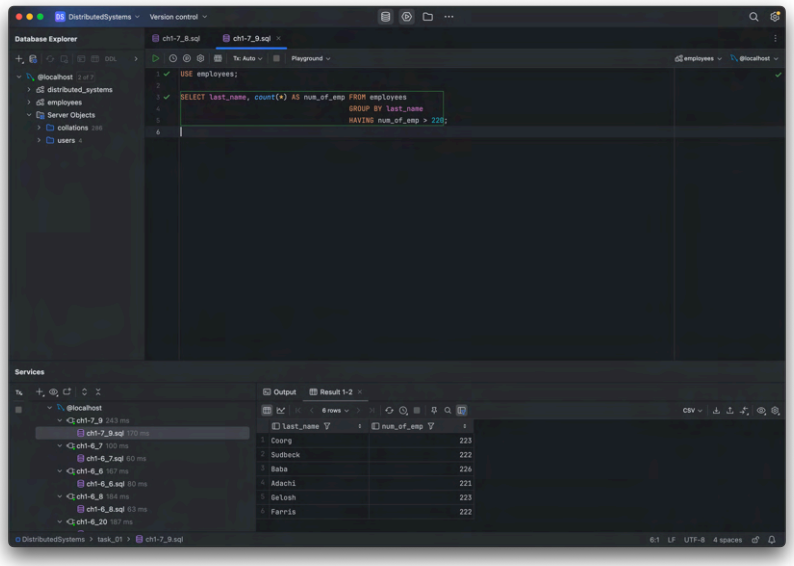

count(*):int
num_of_records:int
Result 1-4
Result 1-5
`count(*)`
300024


count(*):int
num_of_records:int
Result 1-4
Result 1-5
num_of_records
300024

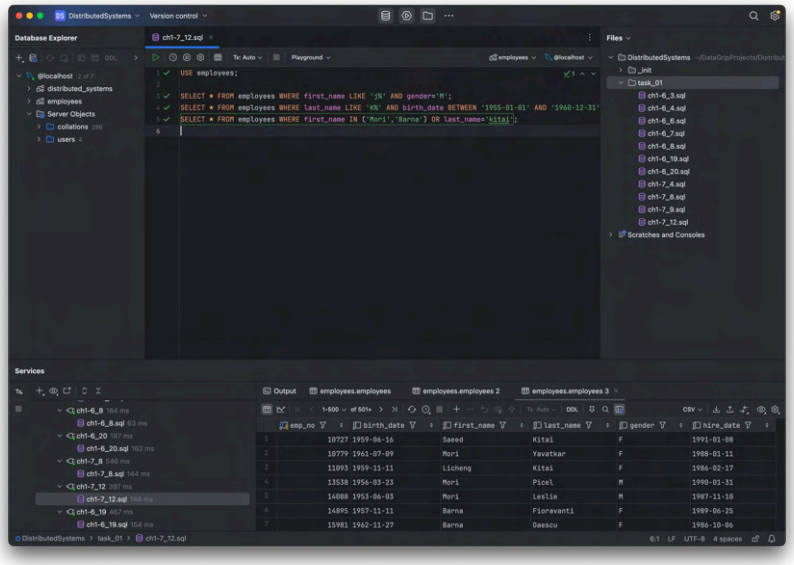

count(*):int
num_of_records:int
Result 1-4
Result 1-5
last_name
`MIN(birth_date)`
`MAX(birth_date)`
Facello 1952-03-15 1964-12-17
Simmel 1952-02-04 1965-01-30
Bamford 1952-02-17 1965-01-22
Koblick 1952-02-22 1965-01-27
Maliniak 1952-02-17 1965-01-21

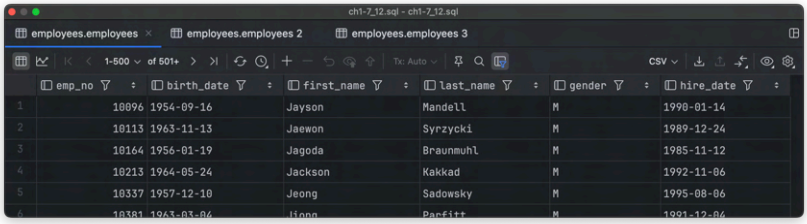

count(*):int
num_of_records:int
Result 1-4
Result 1-5
gender
num_of_emp
M 179973
F 120051

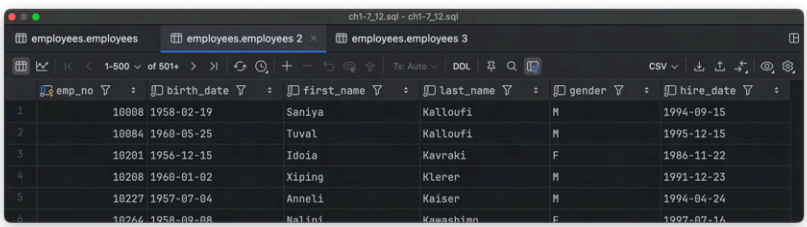
[1-7, #9]

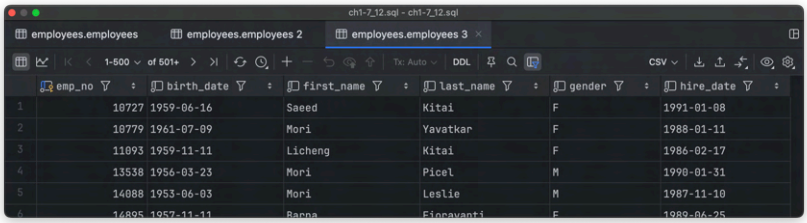

USE employees;
SELECT last_name, count(*) AS num_of_emp FROM employees
GROUP BY last_name
HAVING num_of_emp > 220;
last_name num_of_emp
Coorg 223
Sudbeck 222
Baba 226
Adachi 221
Gelosh 223
Farris 222

[1-7, #12]


USE employees;
SELECT * FROM employees WHERE first_name LIKE 'JN' AND gender='M';
SELECT * FROM employees WHERE last_name LIKE 'K%' AND birth_date BETWEEN '1955-01-01' AND '1960-12-31';
SELECT * FROM employees WHERE first_name IN ('Mori', 'Barna') OR last_name='kitai';

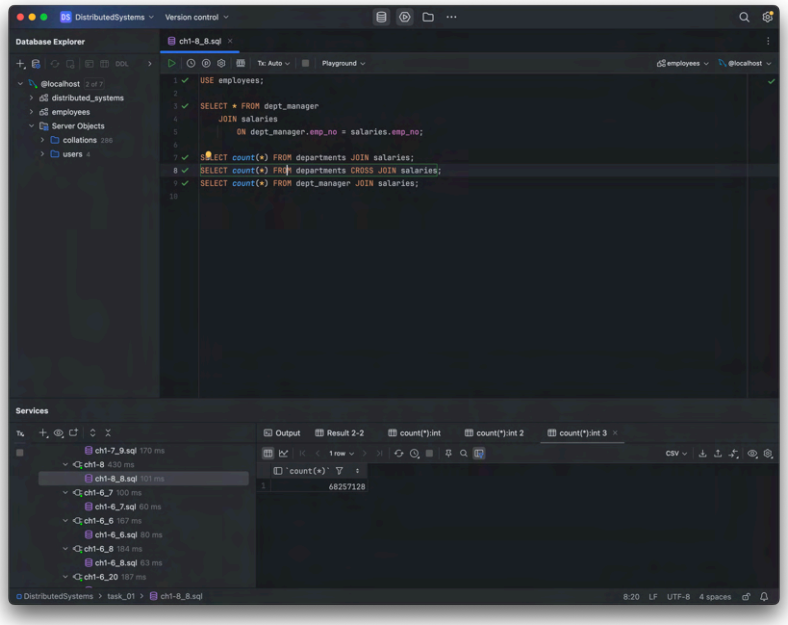

ch1-7_12.sql - ch1-7_12.sql
employees.employees
employees.employees 2
employees.employees 3
emp_no birth_date first_name last_name gender hire_date
10096 1954-09-16 Jayson Mandell M 1990-01-14
10113 1963-11-13 Jaewon Syrzycki M 1989-12-24
10164 1956-01-19 Jagoda Braunmuhl M 1985-11-12
10213 1964-05-24 Jackson Kakkad M 1992-11-06
10337 1957-12-10 Jeong Sadowsky M 1995-08-06

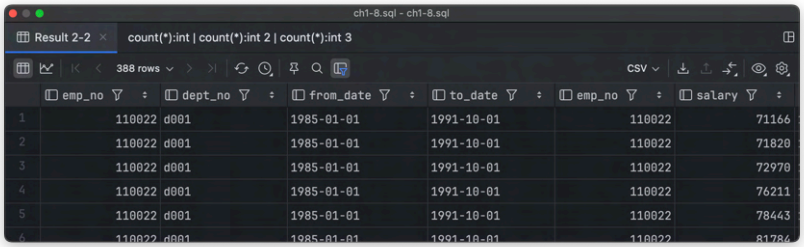

ch1-7_12.sql - ch1-7_12.sql
employees.employees
employees.employees 2
employees.employees 3
emp_no birth_date first_name last_name gender hire_date
10008 1958-02-19 Saniya Kalloufi M 1994-09-15
10084 1960-05-25 Tuval Kalloufi M 1995-12-15
10201 1956-12-15 Idoia Kavraki F 1986-11-22
10208 1960-01-02 Xiping Klerer M 1991-12-23
10227 1957-07-04 Anneli Kaiser M 1994-04-24

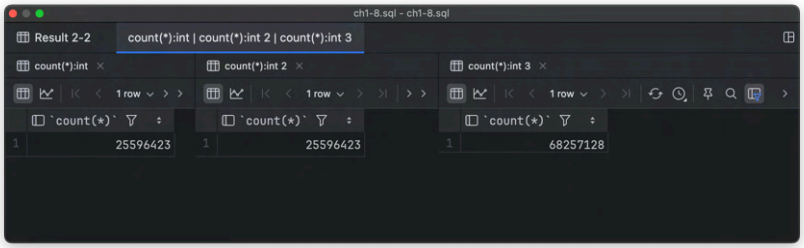


	emp_no	birth_date	first_name	last_name	gender	hire_date
1	10727	1959-06-16	Saeed	Kitai	F	1991-01-08
2	10779	1961-07-09	Mori	Yavatkar	F	1988-01-11
3	11093	1959-11-11	Licheng	Kitai	F	1986-02-17
4	13538	1956-03-23	Mori	Picel	M	1990-01-31
5	14088	1953-06-03	Mori	Leslie	M	1987-11-10
6	14895	1957-11-11	Bapna	Fiorwanti	F	1989-06-25

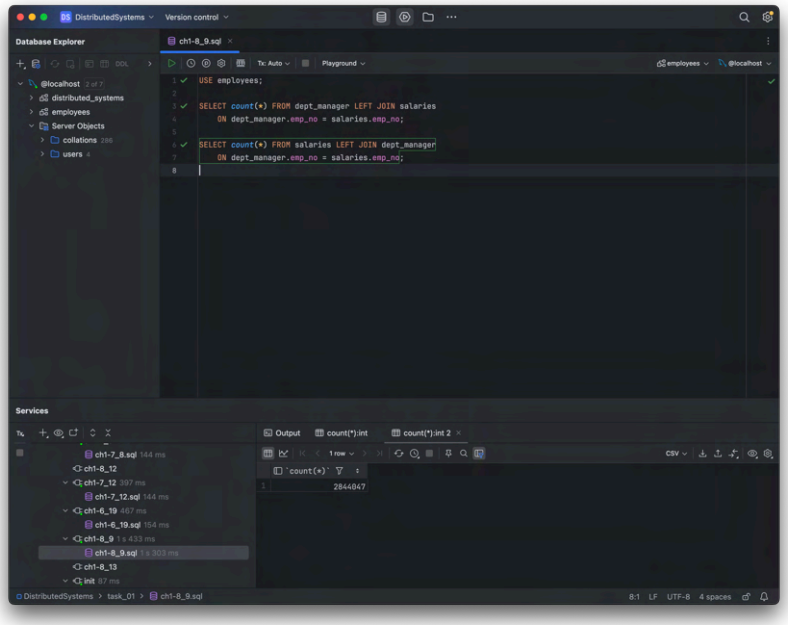
[1-8, #8]

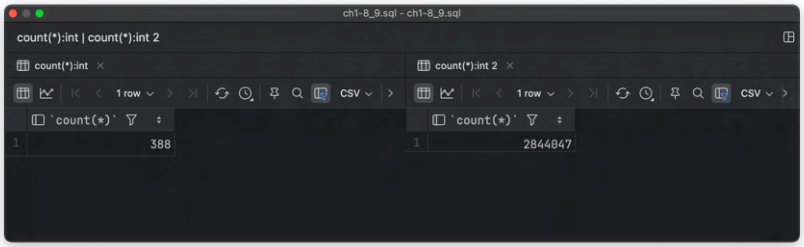

USE employees;
SELECT * FROM dept_manager
JOIN salaries
ON dept_manager.emp_no = salaries.emp_no;
SELECT count(*) FROM departments JOIN salaries;
SELECT count(*) FROM departments CROSS JOIN salaries;
SELECT count(*) FROM dept_manager JOIN salaries;
68257128


ch1-8.sql - ch1-8.sql
Result 2-2
count(*):int | count(*):int 2 | count(*):int 3
388 rows
CSV
emp_no dept_no from_date to_date emp_no salary
110022 d001 1985-01-01 1991-10-01 110022 71166
110022 d001 1985-01-01 1991-10-01 110022 71820
110022 d001 1985-01-01 1991-10-01 110022 72970
110022 d001 1985-01-01 1991-10-01 110022 76211
110022 d001 1985-01-01 1991-10-01 110022 78443

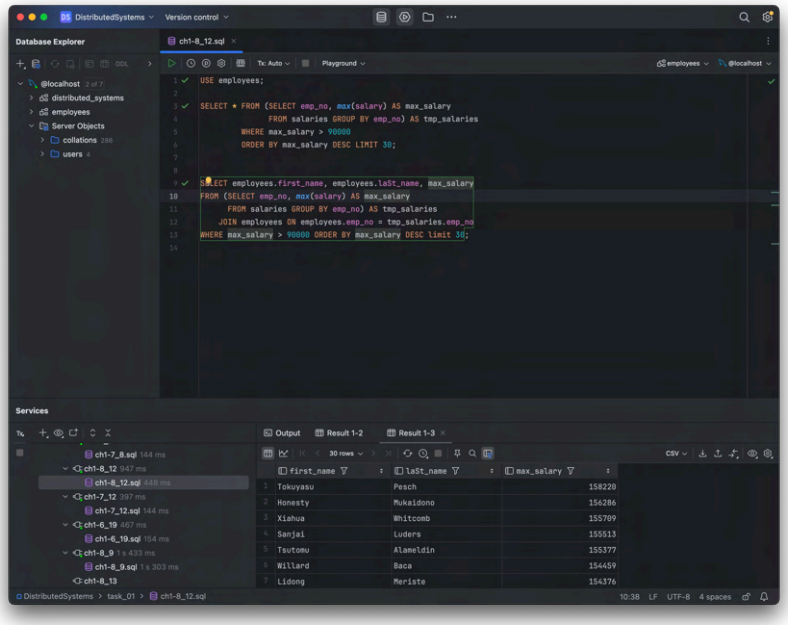

ch1-8.sql - ch1-8.sql
Result 2-2
count(*):int | count(*):int 2 | count(*):int 3
count(*):int
count(*):int 2
count(*):int 3
1 row
`count(*)`
25596423
25596423
68257128

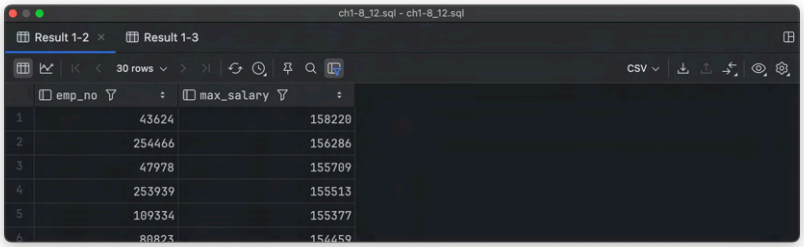
[1-8, #9]

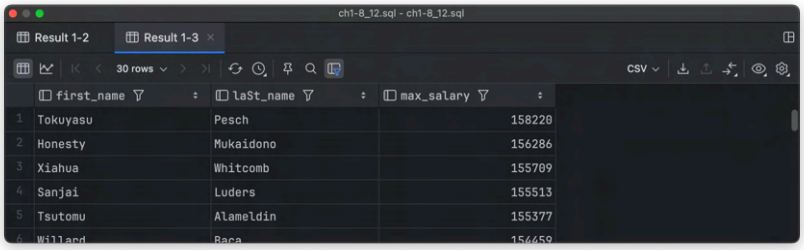

DistributedSystems
Version control
Database Explorer
ch1-8_9.sql
USE employees;
SELECT count(*) FROM dept_manager LEFT JOIN salaries
ON dept_manager.emp_no = salaries.emp_no;
SELECT count(*) FROM salaries LEFT JOIN dept_manager
ON dept_manager.emp_no = salaries.emp_no;
Services
Output
count(*):int
count(*):int 2
`count(*)`
2844047


ch1-8_9.sql - ch1-8_9.sql
count(*):int | count(*):int 2
count(*):int
1 row
CSV
`count(*)`
388
count(*):int 2
1 row
CSV
`count(*)`
2844047

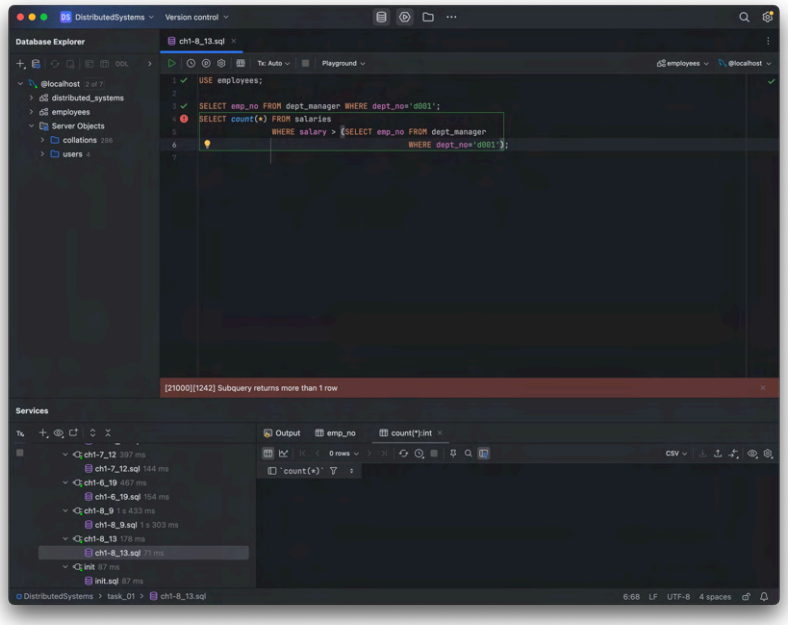
[1-8, #12]


Database Explorer
ch1-8_12.sql
USE employees;
SELECT * FROM (SELECT emp_no, max(salary) AS max_salary
FROM salaries GROUP BY emp_no) AS tmp_salaries
WHERE max_salary > 90000
ORDER BY max_salary DESC LIMIT 30;
SELECT employees.first_name, employees.last_name, max_salary
FROM (SELECT emp_no, max(salary) AS max_salary
FROM salaries GROUP BY emp_no) AS tmp_salaries
JOIN employees ON employees.emp_no = tmp_salaries.emp_no
WHERE max_salary > 90000 ORDER BY max_salary DESC limit 30;
Services
Output
Result 1-2
Result 1-3
first_name
last_name
max_salary
1 Tokuyasu Pesch 158220
2 Honesty Mukaidono 156286
3 Xiahua Whitcomb 155709
4 Sanjai Luders 155513
5 Tsutomu Alameldin 155377
6 Willard Baca 154459
7 Lidong Meriste 154376

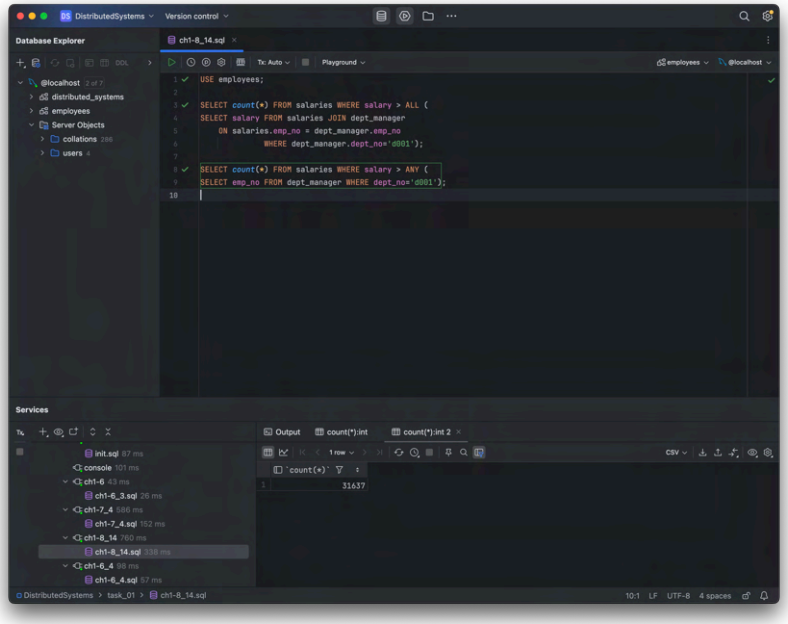

ch1-8_12.sql - ch1-8_12.sql
Result 1-2
Result 1-3
30 rows
CSV
emp_no
max_salary
1 43624 158220
2 254466 156286
3 47978 155709
4 253939 155513
5 109334 155377

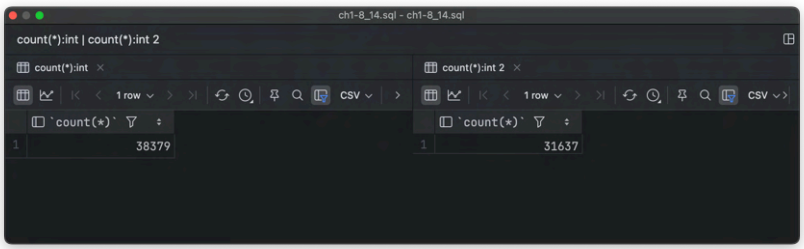

ch1-8_12.sql - ch1-8_12.sql
Result 1-2
Result 1-3
30 rows
CSV
first_name
last_name
max_salary
1 Tokuyasu Pesch 158220
2 Honesty Mukaidono 156286
3 Xiahua Whitcomb 155709
4 Sanjai Luders 155513
5 Tsutomu Alameldin 155377

[1-8, #13]


USE employees;
SELECT emp_no FROM dept_manager WHERE dept_no='d001';
SELECT count(*) FROM salaries
WHERE salary > (SELECT emp_no FROM dept_manager
WHERE dept_no='d001');
[21000][1242] Subquery returns more than 1 row

[1-8, #14]


USE employees;
SELECT count(*) FROM salaries WHERE salary > ALL (
SELECT salary FROM salaries JOIN dept_manager
ON salaries.emp_no = dept_manager.emp_no
WHERE dept_manager.dept_no='d001');
SELECT count(*) FROM salaries WHERE salary > ANY (
SELECT emp_no FROM dept_manager WHERE dept_no='d001');
31637


ch1-8_14.sql - ch1-8_14.sql
count(*):int | count(*):int 2
count(*):int
count(*):int 2
1 row
CSV
`count(*)`
38379
31637