

이보경 4주차 과제

1. dump 백업 – mysql workbench

The screenshot displays the MySQL Workbench interface. The top menu bar includes Database, Server, Tools, Scripting, and Help. The 'Tools' menu is open, showing options like Server Status, Client Connections, Users and Privileges, Status and System Variables, Data Export (highlighted), Data Import, Startup/Shutdown, Server Logs, Options File, Dashboard, Performance Reports, Performance Schema Setup, Management Access Settings..., and Reset Saved Passwords for Connection.

The main editor shows a SQL script with the following content:

```
where cs_phone not regexp '\\d{3}-\\d{3,4}-\\d{3,4}$';

declare continue handler
for not found set endOfRow = TRUE;

open cur;
integrity_loop : LOOP
fetch cur into id, name, gender, birth, path, phone;
if endOfRow then
leave integrity_loop;
end if;

insert into cus_log values (id, name, gender, birth, path, phone);
END LOOP integrity_loop;
close cur;
end
//

call proc_cus();
```

The bottom panel shows the 'Data Export' dialog for 'Local instance 3306'. The 'Object Selection' tab is active, showing a list of tables to export. The 'Export' column has checkboxes for 'Export' and 'Schema'. The 'Schema' column has checkboxes for 'comento' and 'sys'. The 'Export' column is checked for 'comento'. The 'Schema Objects' column is checked for 'cart', 'category', 'cus_log', 'customer', 'product', 'pur_log', and 'purchase'.

The 'Export Options' section shows the following settings:

- Export to Dump Project Folder: ☐ (selected)
- Export to Self-Contained File: ☒ (selected)
- Create Dump in a Single Transaction (self-contained file only): ☐ (unchecked)
- Include Create Schema: ☒ (checked)

The 'Start Export' button is visible at the bottom right of the dialog.

```

Users > bokyung > dumps > Dump20230804.sql
1  CREATE DATABASE IF NOT EXISTS `comento` /*!40100 DEFAULT CHARACTER SET utf8mb4 COLLATE utf8mb4_0900_
2  USE `comento`;
3  -- MySQL dump 10.13 Distrib 8.0.34, for macos13 (arm64)
4  --
5  -- Host: localhost    Database: comento
6  --
7  -- Server version 8.0.33
8
9  /*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
10 /*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
11 /*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
12 /*!50503 SET NAMES utf8 */;
13 /*!40103 SET @OLD_TIME_ZONE=@@TIME_ZONE */;
14 /*!40103 SET TIME_ZONE='+00:00' */;
15 /*!40014 SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0 */;
16 /*!40014 SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0 */;
17 /*!40101 SET @OLD_SQL_MODE=@@SQL_MODE, SQL_MODE='NO_AUTO_VALUE_ON_ZERO' */;
18 /*!40111 SET @OLD_SQL_NOTES=@@SQL_NOTES, SQL_NOTES=0 */;
19
20 --
21 -- Table structure for table `cart`
22 --
23
24 DROP TABLE IF EXISTS `cart`;
25 /*!40101 SET @saved_cs_client      = @@character_set_client */;
26 /*!50503 SET character_set_client = utf8mb4 */;
27 CREATE TABLE `cart` (
28   `cart_id` varchar(20) NOT NULL,
29   `cs_id` varchar(10) NOT NULL,
30   `pd_id` varchar(10) NOT NULL,
31   `amount` int DEFAULT NULL,
32   PRIMARY KEY (`cart_id`),
33   KEY `cs_id` (`cs_id`),
34   KEY `pd_id` (`pd_id`),
35   CONSTRAINT `cart_ibfk_1` FOREIGN KEY (`cs_id`) REFERENCES `customer` (`cs_id`) ON UPDATE CASCADE,
36   CONSTRAINT `cart_ibfk_2` FOREIGN KEY (`pd_id`) REFERENCES `product` (`pd_id`) ON UPDATE CASCADE
37 ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;
38 /*!40101 SET character_set_client = @saved_cs_client */;

```

2. 테이블 백업

1) 테이블 생성

mem_name	job_code	start_datetime	end_datetime	
궁예	왕	2020-04-01 00:00:00	2021-03-30 00:00:00	
사달라	외화벌이	2018-04-01 00:00:00	2022-03-30 00:00:00	
송강호	운전기사	2019-12-30 00:00:00	2021-04-30 00:00:00	
이토히로부미	강도	2019-12-31 00:00:00	2020-04-17 00:00:00	
정은	폭탄성애자	2020-03-21 00:00:00	2020-04-13 00:00:00	
제프베조스	부자	2017-03-21 00:00:00	2031-12-11 00:00:00	
펑수	웅변가	2021-02-22 00:00:00	2022-03-31 00:00:00	
한치두치세치네치	볶음밥볶음밥	2013-01-02 00:00:00	2020-04-01 00:00:00	
NULL	NULL	NULL	NULL	

2) 깜짝퀴즈

```
20 • select *
21     from member_info
22     where str_to_date('20200415', '%Y%m%d') between start_datetime and end_datetime;
23
```

100% 1:19

Result Grid Filter Rows: Search Edit: Export/Import:

mem_name	job_code	start_datetime	end_datetime
궁예	왕	2020-04-01 00:00:00	2021-03-30 00:00:00
사달라	외화벌이	2018-04-01 00:00:00	2022-03-30 00:00:00
송강호	운전기사	2019-12-30 00:00:00	2021-04-30 00:00:00
이토히로부미	강도	2019-12-31 00:00:00	2020-04-17 00:00:00
제프베조스	부자	2017-03-21 00:00:00	2031-12-11 00:00:00
NULL	NULL	NULL	NULL

3) 다른 DB에 백업

```
1 • create table log_DB.member_info
2   as select * from original_DB.member_info;
3
4 • select * from log_DB.member_info;
```

100% 34:4

Result Grid Filter Rows: Search Export:

mem_name	job_code	start_datetime	end_datetime
궁예	왕	2020-04-01 00:00:00	2021-03-30 00:00:00
사달라	외화벌이	2018-04-01 00:00:00	2022-03-30 00:00:00
송강호	운전기사	2019-12-30 00:00:00	2021-04-30 00:00:00
이토히로부미	강도	2019-12-31 00:00:00	2020-04-17 00:00:00
정은	폭탄성애자	2020-03-21 00:00:00	2020-04-13 00:00:00
제프베조스	부자	2017-03-21 00:00:00	2031-12-11 00:00:00
펑수	웅변가	2021-02-22 00:00:00	2022-03-31 00:00:00
한치두치세치네치	볶음밥볶음밥	2013-01-02 00:00:00	2020-04-01 00:00:00

4) 원본테이블 데이터 변경

```
1 • select * from member_info;
2
3 • delete from member_info where start_datetime < str_to_date('20200416', '%Y%m%d');
4
5 • update member_info set job_code='우주대스타' where mem_name='펑수';
```

100% 7:1

Result Grid Filter Rows: Search Edit: Export/Import:

mem_name	job_code	start_datetime	end_datetime
펑수	우주대스타	2021-02-22 00:00:00	2022-03-31 00:00:00
NULL	NULL	NULL	NULL

5) 데이터 복구 (truncate 후 로그 테이블 복사)

```
1 • truncate member_info;
2
3 • insert into member_info
4   select * from log_DB.member_info;
5
6 • select * from member_info;
```

100% 27:6

Result Grid Filter Rows: Search Edit: Export/Import:

mem_name	job_code	start_datetime	end_datetime
궁예	왕	2020-04-01 00:00:00	2021-03-30 00:00:00
사달라	외화벌이	2018-04-01 00:00:00	2022-03-30 00:00:00
송강호	운전기사	2019-12-30 00:00:00	2021-04-30 00:00:00
이토히로부미	강도	2019-12-31 00:00:00	2020-04-17 00:00:00
정은	폭탄성애자	2020-03-21 00:00:00	2020-04-13 00:00:00
제프베조스	부자	2017-03-21 00:00:00	2031-12-11 00:00:00
펑수	웅변가	2021-02-22 00:00:00	2022-03-31 00:00:00
한치두치세치네치	볶음밥볶음밥	2013-01-02 00:00:00	2020-04-01 00:00:00
NULL	NULL	NULL	NULL

3. DB 장애처리

1) 없는 컬럼에 데이터 insert

```
mysql> alter table customer drop column gender;
Query OK, 0 rows affected (0.16 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> insert into customer ('cs06', 'Lally', 'F', 2005, 'p02', '010-3998-3028');
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near ''cs06', 'Lally', 'F', 2005, 'p02', '010-3998-3028')' at line 1
mysql> show warnings;
```

Level	Code	Message
Error	1064	You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near ''cs06', 'Lally', 'F', 2005, 'p02', '010-3998-3028')' at line 1

```
1 row in set (0.01 sec)
```

2) lock 발생 및 kill

```
mysql> select user();
+-----+
| user() |
+-----+
| root@localhost |
+-----+
1 row in set (0.01 sec)

mysql> update rec_cust set data_mod_nm = 'changer', data_mod_time = SLEEP(200);

```

```
mysql> select * from performance_schema.data_locks;
```

ENGINE	ENGINE_LOCK_ID	ENGINE_TRANSACTION_ID	THREAD_ID	EVENT_ID	OBJECT_SCHEMA	OBJECT_NAME	PARTITION_NAME	SUBPARTITION_NAME	INDEX_NAME
INNODB	140691837592360:1104:140691720176128		2569	98	65	mysql	rec_cust	NULL	NULL
INNODB	140691720176128	TABLE	IX	GRANTED	NULL				
INNODB	140691837592360:38:4:2:140691720173216		2569	98	65	mysql	rec_cust	NULL	PRIMARY
INNODB	140691720173216	RECORD	X	WAITING	'ID01'				
INNODB	140691837590744:1104:140691720164048		2568	81	382	mysql	rec_cust	NULL	NULL
INNODB	140691720164048	TABLE	IX	GRANTED	NULL				
INNODB	140691837590744:38:4:2:140691720161056		2568	81	382	mysql	rec_cust	NULL	PRIMARY
INNODB	140691720161056	RECORD	X	GRANTED	'ID01'				

```
4 rows in set (0.03 sec)
```

```
mysql> show processlist;
```

Id	User	Host	db	Command	Time	State	Info
5	event_scheduler	localhost	NULL	Daemon	1792935	Waiting on empty queue	NULL
29	root	localhost	mysql	Query	43	User sleep	update rec_cust set data_mod_nm = 'changer', data_mod_time = SLEEP(200)
30	bokyung	localhost	mysql	Sleep	214		NULL
31	root	localhost	mysql	Query	42	updating	update rec_cust set data_mod_nm = 'changer2', data_mod_time = SLEEP(200)
32	root	localhost	mysql	Query	0	init	show processlist

```
5 rows in set (0.01 sec)
```

-- kill

```
mysql> show processlist;
```

Id	User	Host	db	Command	Time	State	Info
5	event_scheduler	localhost	NULL	Daemon	1793076	Waiting on empty queue	NULL
29	root	localhost	mysql	Query	7	User sleep	update rec_cust set data_mod_nm = 'changer', data_mod_time = SLEEP(200)
30	bokyung	localhost	mysql	Sleep	355		NULL
31	root	localhost	mysql	Query	2	updating	update rec_cust set data_mod_nm = 'changer2', data_mod_time = SLEEP(200)
32	root	localhost	mysql	Query	0	init	show processlist

```
5 rows in set (0.01 sec)
```

```
mysql> kill 29;
```

```
Query OK, 0 rows affected (0.02 sec)
```

```
mysql> update rec_cust set data_mod_nm = 'changer', data_mod_time = SLEEP(200);
```

```
ERROR 2013 (HY000): Lost connection to MySQL server during query
```

```
No connection. Trying to reconnect...
```

```
Connection id: 34
```

```
Current database: mysql
```

```
ERROR 1205 (HY000): Lock wait timeout exceeded; try restarting transaction
```

4. PGSQL 설치

```
bokyung@bokyungui-MacBookAir ~ % postgres --version
```

```
postgres (PostgreSQL) 14.8 (Homebrew)
```

```
bokyung@bokyungui-MacBookAir ~ % brew services start postgresql
```

```
Warning: Formula postgresql was renamed to postgresql@14.
```

```
==> Successfully started `postgresql@14` (label: homebrew.mxcl.postgresql@14)
```

```
x bokyung@bokyungui-MacBookAir ~ % psql -U bokyung postgres
```

```
psql (14.8 (Homebrew))
```

```
Type "help" for help.
```

```
postgres=# create user bokyung;
```

```
ERROR: role "bokyung" already exists
```

```
postgres=# alter user bokyung password 'dlqhrud-1124';
```

```
ALTER ROLE
```

```
postgres=# alter user bokyung superuser;
```

```
ALTER ROLE
```

```
postgres=#
```

```
`select relation :: regclass, mode, granted, pid, * from pg_locks;`
```

```
bjid | objsubid | virtualtransaction | pid | mode | granted | fastpath | waitstart
-----+-----+-----+-----+-----+-----+-----+-----
pg_locks | AccessShareLock | t | 56408 | relation | 14042 | 12290 | 
 | 3/10 | 56408 | AccessShareLock | t | t | 
 | ExclusiveLock | t | 56408 | virtualxid | 3/10 | 
 | 3/10 | 56408 | ExclusiveLock | t | t | 
(2 rows)
```

```
postgres=# create user bokyung;
ERROR:  role "bokyung" already exists
postgres=# alter user bokyung password 'dlqhrud-1124';
ALTER ROLE
postgres=# alter user bokyung superuser;
ALTER ROLE
postgres=# set search_path to bokyung;
SET
postgres=# select relation :: regclass, mode, granted, pid, * from pg_locks;
postgres=# \watch 3;
금  8/ 4 17:36:01 2023 (every 3s)

SET

금  8/ 4 17:36:04 2023 (every 3s)

SET

금  8/ 4 17:36:07 2023 (every 3s)

SET

금  8/ 4 17:36:10 2023 (every 3s)

SET

^C
postgres=#
```