

<7 조>

권한 부여 2

```
root@dbsecure:~/dbsecure2021/codes# sudo mysql -u dbteacher -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 5.7.35-0ubuntu0.18.04.2 (Ubuntu)

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Type 'help;' or '\h' for help. Type '\c' to clear the current input s

mysql>
```

dbteacher 로 로그인

```
mysql> use companyDB;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> grant select, delete on departments to dbstudent1@localhost with grant option;
Query OK, 0 rows affected (0.00 sec)

mysql> grant create view on companyDB.* to dbstudent1@localhost;
Query OK, 0 rows affected (0.00 sec)
```

사용할 db 지정, dbstudent1 에게 departments 에 대한 select, delete 권한을 grant 옵션과 함께 부여
dbstudent1 에게 companyDB 의 모든 테이블에 대한 view 생성 권한 주기

```
root@dbsecure:~/dbsecure2021/codes# sudo mysql -u dbstudent1 -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 9
Server version: 5.7.35-0ubuntu0.18.04.2 (Ubuntu)

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| companyDB |
+-----+
2 rows in set (0.01 sec)
```

dbstudent1 으로 바꾸어 로그인하여 show databases 입력 시, 권한을 받은 companyDB 가 들어있음

```
mysql> use companyDB;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> show tables;
+-----+
| Tables_in_companyDB |
+-----+
| departments          |
| dependents           |
| dept_locations       |
| employees             |
| projects              |
| works_on              |
+-----+
6 rows in set (0.00 sec)
```

show tables 명령으로 확인하면 view 명령에서 *로 모든 테이블에 대한 권한을 받았기 때문에 모든 테이블이 들어있음

```
mysql> select * from departments;
+-----+-----+-----+-----+
| Dname          | Dnumber | Mgr_ssn | Mgr_start_date |
+-----+-----+-----+-----+
| Headquarters   | 1       | 888665555 | 1981-06-19      |
| Administraion  | 4       | 987654321 | 1995-01-01      |
| Research       | 5       | 333445555 | 1988-05-22      |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> select * from employees;
ERROR 1142 (42000): SELECT command denied to user 'dbstudent1'@'localhost' for table 'employees'
```

select * from departments 는 결과가 나오지만 select * from employees 는 권한을 부여하지 않아 결과가 나오지 않음을 확인할 수 있다.

```
mysql> create view department2 as select * from departments;
Query OK, 0 rows affected (0.01 sec)
```

view 명령을 앞에서 모든 테이블에 대해 주었기 때문에 departments 에 대해서 정상적으로 view 생성됨

권한부여 3

```
mysql> grant select on departments to dbstudent2@localhost;  
Query OK, 0 rows affected (0.01 sec)
```

권한부여 2 문제에서 dbstudent1 에게 grant 옵션을 넣어 권한을 주었기 때문에 다른 계정(dbstudent2)에게 select 권한을 정상적으로 줄 수 있음을 확인하였다.

```
root@dbsecure:~/dbsecure2021/codes# sudo mysql -u dbstudent2 -p  
Enter password:  
Welcome to the MySQL monitor.  Commands end with ; or \g.  
Your MySQL connection id is 10  
Server version: 5.7.35-0ubuntu0.18.04.2 (Ubuntu)  
  
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owners.  
  
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  
  
mysql> select * from companyDB.departments;  
+-----+-----+-----+-----+  
| Dname          | Dnumber | Mgr_ssn | Mgr_start_date |  
+-----+-----+-----+-----+  
| Headquarters   | 1       | 888665555 | 1981-06-19      |  
| Administraion  | 4       | 987654321 | 1995-01-01      |  
| Research       | 5       | 333445555 | 1988-05-22      |  
+-----+-----+-----+-----+  
3 rows in set (0.00 sec)
```

dbstudent2 에게 정상적으로 권한이 넘어가며 select 가 동작하는 것을 확인하였다.
-계정을 dbstudent2 로 바꾸어 departments 에 대한 select 질의를 실행하였다.

권한부여 4

dbteacher 로 로그인하여 dbstudent2 에 employees 에 대한 select 권한과 companyDB 의 employees 테이블에 대한 create view 권한을 부여했다.

```
db$ 20180445@dbsecure:~$ sudo mysql -u dbteacher -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 122
Server version: 5.7.35-0ubuntu0.18.04.2 (Ubuntu)

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> grant select on companyDB.employees to dbstudent2@localhost;
Query OK, 0 rows affected (0.00 sec)

mysql> grant create view on companyDB.employees to dbstudent2@localhost;
Query OK, 0 rows affected (0.00 sec)

mysql> exit
Bye
```

dbstudent2 에 여성 employee 로만 이루어진 femployee 이름의 view 를 생성하였다.

use companyDB;

create view femployee as select * from employees where Sex='F';

```
root@dbsecure:~/dbsecure2021/codes# sudo mysql -u dbstudent2 -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 12
Server version: 5.7.35-0ubuntu0.18.04.2 (Ubuntu)

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> create view femployee as select * from employees where Sex='F';
ERROR 1046 (3D000): No database selected
mysql> use companyDB;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> create view femployee as select * from employees where Sex='F';
Query OK, 0 rows affected (0.01 sec)
```

다시 dbteacher 로 로그인해서 femployee 에 대한 select 권한을 dbstudent2 에게 부여한다.

```
mysql> use companyDB;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> grant select on femployee to dbstudent2@localhost;
Query OK, 0 rows affected (0.00 sec)
```

dbstudent2 로 로그인해서 질의하면 여성 employee 로만 이루어진 femployee 이름의 view 에 대한 데이터가 나옴을 확인할 수 있다.

select * from femployee;

```
mysql> use companyDB;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> select * from femployee;
```

Fname	Minit	Lname	Ssn	Bdate	Address	Sex	Salary	Super_ssn	Dno
Joyce	A	English	453453453	1972-07-31	5631 Rice, Houston, TX	F	25000.00	333445555	5
Sarah	B	Lee	876587658	1969-10-15	1917 Federal, Spring, TX	F	28000.00	888665555	4
Jennifer	S	Wallace	987654321	1941-06-20	291 Berry, Bellaire, TX	F	43000.00	888665555	4
Alicia	J	Zelaya	999887777	1968-01-19	3321 Castle, Spring, TX	F	25000.00	987654321	4

```
4 rows in set (0.00 sec)
```