نظم قواعد المعطيات المتقدمة

الجلسة الرابعة

Privileges

Privileges

System Privileges
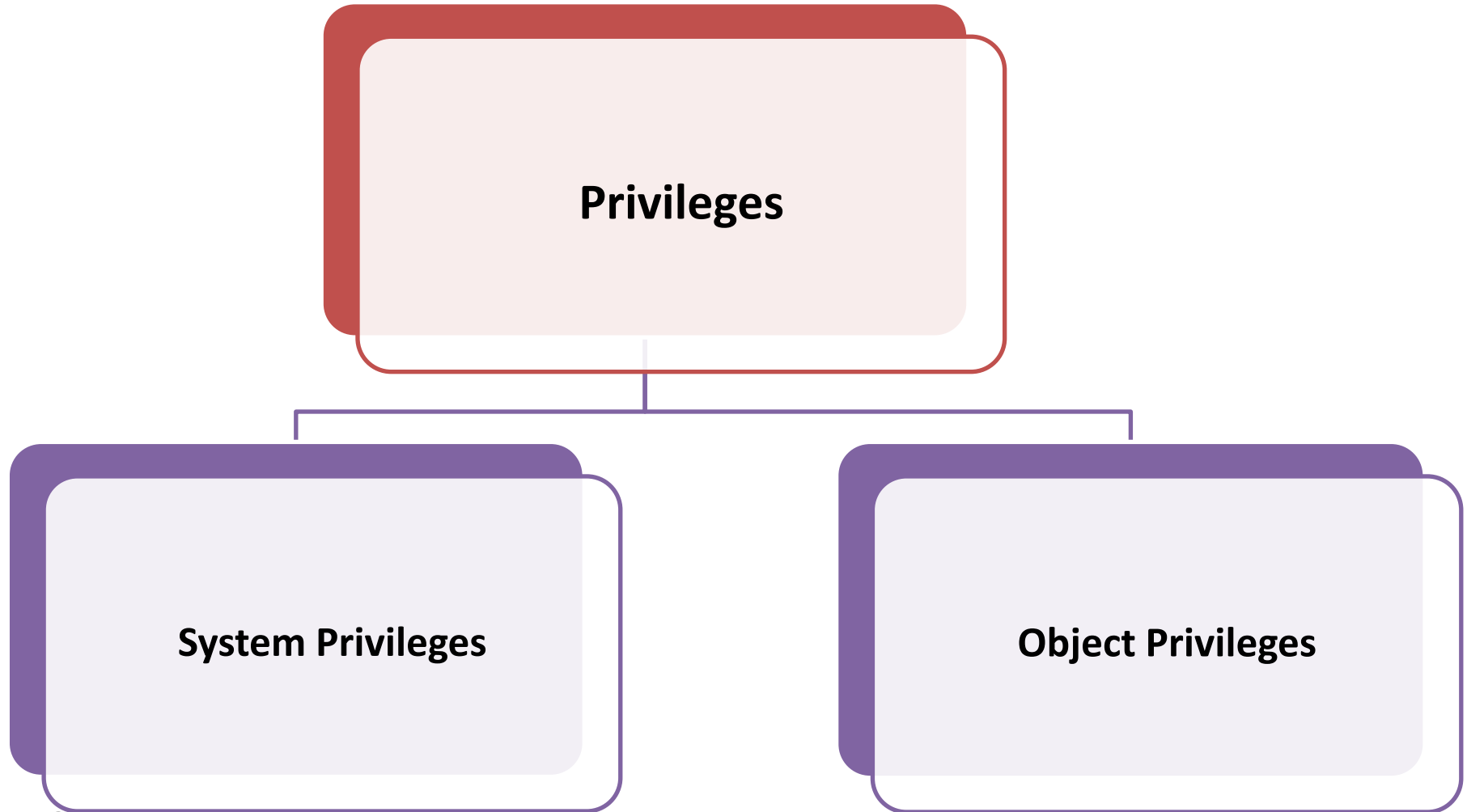
Object Privileges

Checking Object Privileges

You can check which table object privileges a user has made to other users by querying USER_TAB_PRIVS_MADE. Table below describes the columns in USER_TAB_PRIVS_MADE.

Column	Type	Description
grantee	VARCHAR2(30)	User to whom the privilege was granted
table_name	VARCHAR2(30)	Name of the object (such as a table) on which the privilege was granted
grantor	VARCHAR2(30)	User who granted the privilege
privilege	VARCHAR2(40)	Privilege on the object
grantable	VARCHAR2(3)	Whether the grantee can grant the privilege to another (YES or NO)
hierarchy	VARCHAR2(3)	Whether the privilege forms part of a hierarchy (YES or NO)

Checking Object Privileges

You can access the USER_COL_PRIVS_MADE view for information on the column-level object privileges granted to users.

Object Privileges

An *object privilege allows a user to perform certain actions on database objects, such as* executing DML statements on tables. For examples :

SELECT	Perform a select.
INSERT	Perform an insert.
UPDATE	Perform an update.
DELETE	Perform a delete.
EXECUTE	Execute a stored procedure.

Granting Object Privileges to a User

GRANT *privilege [, privilege...]* **ON** [*schema.]object* **TO** *username [, another_username ...]* [WITH GRANT OPTION] *;*

[WITH GRANT OPTION] *:*
To give a user the ability to grant a Object privileges they have to other users :

Revoking Object Privileges from a User

Revoke *privilege [, privilege...]* **ON** *[schema.]object* **FROM** *username [, another_username...];*

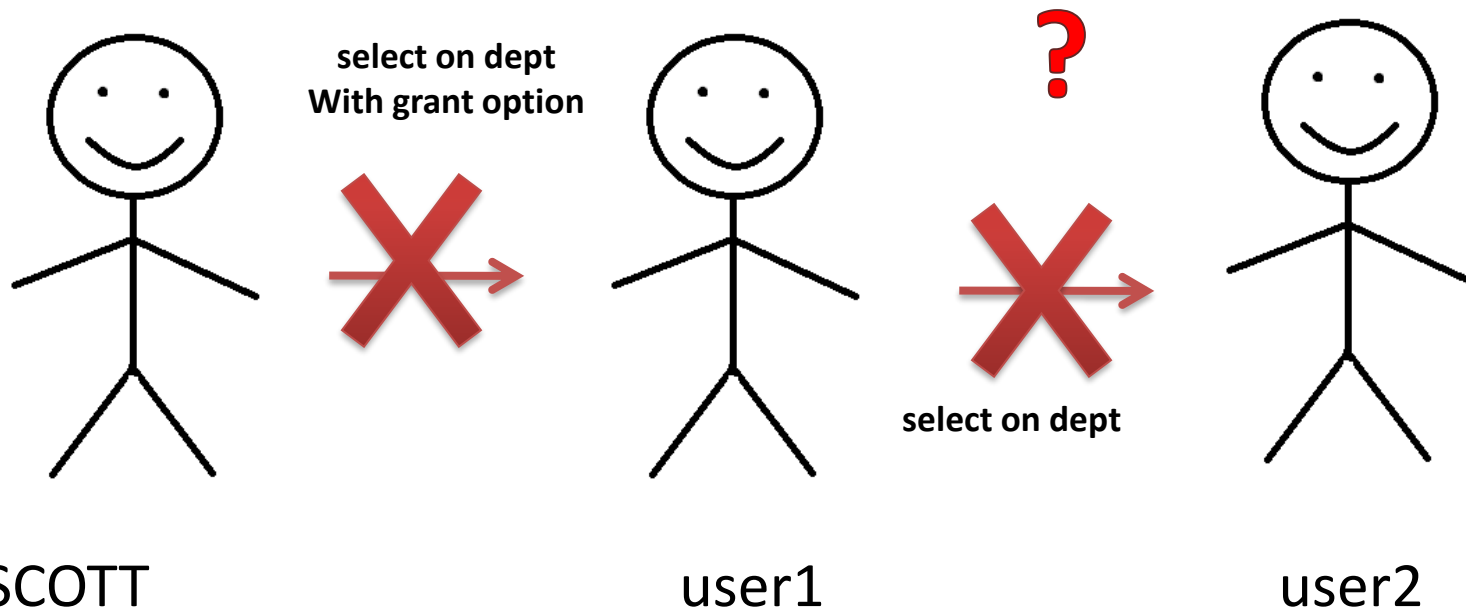# Practical Work

SCOTT :

GRANT select,insert on dept to user1;

➔user1 can select , insert but not update , delete

SCOTT :

GRANT select,update(sal) on emp to user1;

Object Privileges

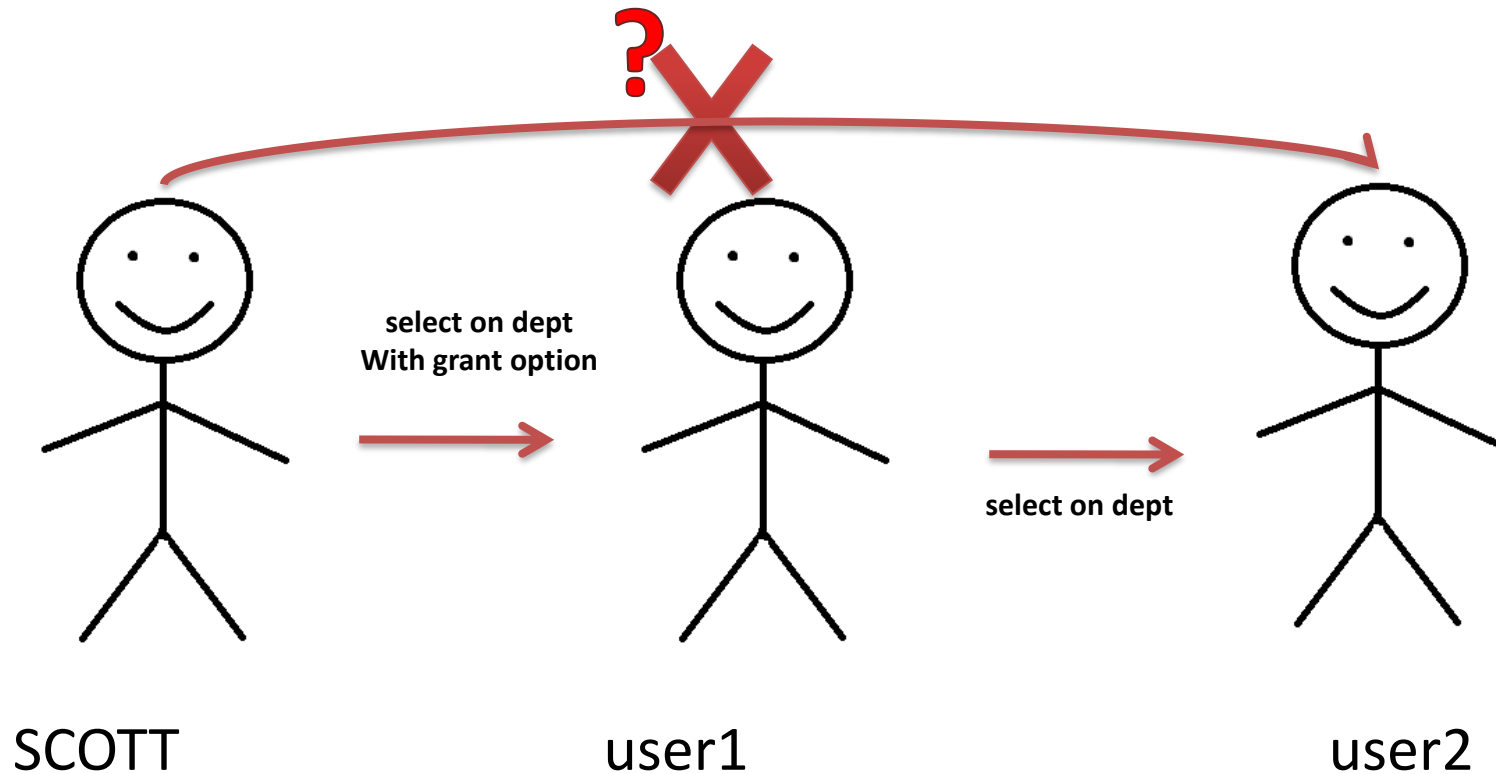SCOTT   user1   user2

Scott grants select on dept to user1 with grant option , user1 grants select on dept to user2 , Scott revokes select on dept from user1
Can user2 still select from dept ????

No

Object Privileges

SCOTT   user1   user2

Another Scenario :

Scott grants select on dept to user1 with grant option , user1 grant select on dept to user2 , can Scott revoke select on dept from user2 ??

No

In Object Priviledge Only user who grant the Privilege can revoke it .

Object Privileges

```
SQL> conn scott/tiger
.متصل
SQL> grant select on dept to d1 with grant option;

تم منح بنجاح

SQL> conn d1/d1
.متصل
SQL> select * from dept;
select * from dept
              *
:يوجد خطأ عند سطر ١
ORA-00942: الجدول أو الجدول الاعتباري غير موجود


SQL> select * from scott.dept;

    DEPTNO DNAME          LOC
---------- -------------- -------------
        10 ACCOUNTING     NEW YORK
        20 RESEARCH       DALLAS
        30 SALES          CHICAGO
        40 OPERATIONS     BOSTON

SQL> grant select on dept to d2;
grant select on dept to d2
                *
:يوجد خطأ عند سطر ١
ORA-00942: الجدول أو الجدول الاعتباري غير موجود

SQL> grant select on scott.dept to d2;

تم منح بنجاح
```

Object Privileges

```
SQL> conn d2/d2
‫متصل‬.
SQL> select * from dept;
select * from dept
                  *
‫يوجد خطأ عند سطر‬ ١:
ORA-00942: ‫الجدول أو الجدول الاعتباري غير موجود‬


SQL>  select * from scott.dept;

    DEPTNO DNAME          LOC
---------- -------------- -------------
        10 ACCOUNTING     NEW YORK
        20 RESEARCH       DALLAS
        30 SALES          CHICAGO
        40 OPERATIONS     BOSTON

SQL> conn scott/tiger
‫متصل‬.
SQL> revoke select on dept from d2;
revoke select on dept from d2
*
‫يوجد خطأ عند سطر‬ ١:
ORA-01927: ‫لامتيازات لم تقم بمنحها‬ REVOKE ‫لا يمكن تنفيذ‬


SQL> conn d1/d1
‫متصل‬.
SQL> revoke select on scott.dept from d2;

‫تم سحب بنجاح‬
```

In Object Priviledge Only user who grant the Priviledge can revoke it .

Notes

- It is impossible to have 2 users in the same name in the same database.

- It is possible to have 2 tables in the same name in the same database , but they must be in different schemas .