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Oracle Administration Sheet

Quiz: Oracle Administration - User Creation and Privilege Granting

1. Creating Users:

Write a SQL statement to create new users:

a. Manger users named as ‘ali’ with the password "123".

Answer:

```
SQL> conn sys as sysdba / my_admin_password
SQL> Create user ali identified by 123;
```

b. Let Ali Create User who are under his supervision of as ahmed the senior, omar the junior.

Answer:

```
SQL> conn sys as sysdba/my_admin_password;
SQL> Grant create user to ali;
SQL> Grant create session to ali;
SQL> conn ali/123;
SQL> create user Ahmed identified by 123;
SQL> create user Omar identified by 123;
```

c. Allow Ali to create a table named "employee" with attributes such as id, name, and gender and insert three records in the table.

Answer:

```
SQL> conn sys as sysdba/my_admin_password;
SQL> Grant create table to ali;
SQL> Alter user ali quota 100M on system;
SQL> conn ali/123
SQL> create table employee(id int ,name varchar(50) ,gender varchar(20));
SQL> insert into employee values(1,'OSSAMA','MALE');
SQL> insert into employee values(2,'WALID','MALE');
SQL> insert into employee values(3,'NOHA','FMALE');
```

2. Roles:

a. Create a role named "Manager Role" that includes the create session privileges, create table, allow mangers to create and drop users, let managers select privilege on all tables in the database. All these privileges should be in admin option to grant it to other user

Answer:

```
SQL> conn sys as sysdba/my_admin_password;
SQL> create role manger_role;
SQL> grant create session ,create table ,create user ,drop user ,select any
table to manger_role with admin option;
```

3. Granting Privileges:

a. Grant the "Manager Role" to the user "ali".

Answer:

```
SQL> conn sys as sysdba/my_admin_password;
SQL> grant manger_role to ali;
```

b. Let Ali give Ahmed the privilege to insert, select, update data in employee table with granting option.

Answer:

```
SQL> conn ali/123
SQL> Grant insert , select , update on employee to Ahmed with grant option;
```

c. Let ahmed to give 'omar' an access to insert two records to the employee table.

Answer:

```
SQL> conn sys as sysdba/my_admin_password;
SQL> grant create session to ahmed;
SQL> grant create session to Omar;
SQL> conn Ahmed/123;
SQL> grant insert on ali.employee to Omar ;
SQL> grant create session to Omar ;
SQL> conn Omar/123;
SQL> insert into ali.employee values(4 ,'OMNIA','FMALE');
SQL> insert into ali.employee values(4,'GHALLY','MALE');
SQL> commit;
```

d. Allow Omar select data from employee table.

Answer:

```
SQL> conn sys as sysdba/my_admin_password;

SQL> grant select on ali.employee to Omar ;

SQL> conn Omar/123;

SQL> select * from ali.employee ;
```

Result:

ID	NAME	GENDER
1	OSSAMA	MALE
1	WALID	MALE
1	NOHA	FMALE
4	OMNIA	FMALE
4	GHALLY	MALE

e. e. Let Ali select the employee table and check the updates.

Answer:

```
SQL> conn ali/123;

SQL> select * from employee;
```

Result:

ID	NAME	GENDER
1	OSSAMA	MALE
1	WALID	MALE
1	NOHA	FMALE
4	OMNIA	FMALE
4	GHALLY	MALE

4. Retrieve All Object and System Privileges and Roles from the three users show the results.

Answer:

```
SQL> conn ali/123;

SQL> select * from user_sys_privs;
```

Result:

USERNAME	PRIVILEGE	ADM
ALI	CREATE USER	NO
ALI	CREATE SESSION	NO
ALI	CREATE TABLE	NO

```
SQL> select * from user_tab_privs;
```

Result:

GRANTEE	OWNER		
TABLE_NAME	GRANTOR		
PRIVILEGE		GRA	HIE
OMAR	ALI		
EMPLOYEE	AHMED		
INSERT		NO	NO
AHMED	ALI		
EMPLOYEE	ALI		
UPDATE		YES	NO

GRANTEE	OWNER

```
------------------------------ ------------------------------
TABLE_NAME                     GRANTOR
------------------------------ ------------------------------
PRIVILEGE                                GRA HIE
---------------------------------------- --- ---

AHMED                          ALI
EMPLOYEE                       ALI
SELECT                                   YES NO

OMAR                           ALI
EMPLOYEE                       ALI

GRANTEE                        OWNER
------------------------------ ------------------------------
TABLE_NAME                     GRANTOR
------------------------------ ------------------------------
PRIVILEGE                                GRA HIE
---------------------------------------- --- ---
SELECT                                   NO  NO

AHMED                          ALI
EMPLOYEE                       ALI
INSERT                                   YES NO
```

```
SQL> select * from user_role_privs;
Result:
USERNAME                       GRANTED_ROLE                   ADM DEF OS_
------------------------------ ------------------------------ --- --- ---
ALI                            MANGER_ROLE                    NO  YES NO
```

```
SQL> conn Omar/123;
```

```
SQL> select * from user_sys_privs;
Result:
USERNAME                       PRIVILEGE                                ADM
------------------------------ ---------------------------------------- ---
OMAR
```

```
SQL> select * from user_tab_privs;
Result:
USERNAME                       PRIVILEGE                                ADM
------------------------------ ---------------------------------------- ---
OMAR                           CREATE SESSION                           NO
```

```
SQL> select * from user_tab_privs;
```

```
GRANTEE                        OWNER
------------------------------ ------------------------------
TABLE_NAME                     GRANTOR
------------------------------ ------------------------------
PRIVILEGE                                GRA HIE
---------------------------------------- --- ---
OMAR                           ALI
EMPLOYEE                       AHMED
INSERT                                   NO  NO

OMAR                           ALI
EMPLOYEE                       ALI
SELECT                                   NO  NO

GRANTEE                        OWNER
------------------------------ ------------------------------
TABLE_NAME                     GRANTOR
------------------------------ ------------------------------
PRIVILEGE                                GRA HIE
---------------------------------------- --- ---
```

```
SQL> select * from user_role_privs;
```

Result:

no rows selected

```
SQL> conn Ahmed/123;
```

```
SQL> select * from user_sys_privs;
```

Result:

```
USERNAME                       PRIVILEGE                                ADM
------------------------------ ---------------------------------------- ---
AHMED                          CREATE SESSION                           NO
```

```
SQL> select * from user_tab_privs;
```

Result:

```
GRANTEE                        OWNER
------------------------------ ------------------------------
TABLE_NAME                     GRANTOR
------------------------------ ------------------------------
PRIVILEGE                                GRA HIE
---------------------------------------- --- ---
OMAR                           ALI
EMPLOYEE                       AHMED
INSERT                                   NO  NO

AHMED                          ALI
EMPLOYEE                       ALI
UPDATE                                   YES NO

GRANTEE                        OWNER
------------------------------ ------------------------------
TABLE_NAME                     GRANTOR
------------------------------ ------------------------------
PRIVILEGE                                GRA HIE
---------------------------------------- --- ---

AHMED                          ALI
EMPLOYEE                       ALI
SELECT                                   YES NO

AHMED                          ALI
EMPLOYEE                       ALI

GRANTEE                        OWNER
------------------------------ ------------------------------
TABLE_NAME                     GRANTOR
------------------------------ ------------------------------
PRIVILEGE                                GRA HIE
---------------------------------------- --- ---
INSERT                                   YES NO
```

```
SQL> select * from user_role_privs;
```

Result:

no rows selected

5. Revoking Privileges:

a. Write an SQL statement to revoke all privileges from the user ‘Omar’.

Answer:

```
SQL> conn sys as sysdba/my_admin_password;
```

```
SQL> revoke all privileges from Omar;
```

b. Let Omar Select employee table and show the result.

Answer:

```
SQL> conn sys as sysdba/my_admin_password;

SQL> grant select on ali.employee to Omar;

SQL> conn Omar/123;

SQL> select from * ali.employee;
```

Result :

ID	NAME	GENDER
1	OSSAMA	MALE
1	WALID	MALE
1	NOHA	FMALE
4	OMNIA	FMALE
4	GHALLY	MALE

c. Revoke Create session privileges from Ahmed.

Answer:

```
SQL> conn sys as sysdba/my_admin_password

SQL> revoke create session from Ahmed;
```

d. Let Ahmed connect again and show the result

Answer:

```
SQL> conn Ahemed/123;
```

Result :

ERROR:
ORA-01045: user AHMED lacks CREATE SESSION privilege; logon denied