

Experiment NO :- 10.

Title : Creating Database / Table Space

- Managing Users :- Create User, Delete User
- Managing passwords
- Managing roles :- Grant, revoke.

Objective :-

To understand the concept of Administrative commands.

Theory :-

DATABASE is collection of coherent data.

To Create database we have.

Syntax : CREATE DATABASE <database-name>

Example : CREATE DATABASE my-db;

TABLESPACE:

The oracle database consists of one or more logical storage units called tablespaces.

Each tablespace in an oracle database consists of one or more files called datafiles, which are physical structures that conform to the operating system in which oracle is running.

Syntax :

```
CREATE <tablespace name> DATAFILE 'C:\oracle\ora9i\app\orade\product\10.2.0\server\<file name>.dbf' SIZE 50M;
```


Example:-

```
Create tablespace te_cs DATAFILE 'C:\oracle\ora92\app\oracle\product\10.2.0\server\user.dbf'
SIZE 50M;
```

CREATE USER:

The DBA creates user by executing CREATE USER statement. The user is someone who connects to the database if enough privilege is granted.

Syntax:

```
SQL > CREATE USER <username> IDENTIFIED BY
<password>
```

Example:

```
SQL> create user James identified by 'bob';
```

PRIVILEGES:-

A privilege is a right to execute an SQL statement or to access another user's object. In Oracle, there are two types of privileges.

- System privileges
- Object privileges

• System privileges: are those through which the user can manage the performance of database actions. It is normally granted by DBA to users.

- Object privileges: allow access to objects or privileges on object, i.e. tables, table columns, tables, views etc.. it includes alter, delete, insert, select update etc.

GRANT:

The DBA uses the GRANT statement to allocate system privileges to other user

Syntax:

SQL> GRANT privilege TO - USER;

Eg: Grant create table, create view to James;

Object privileges vary from object to object. An owner has all privilege or specific privileges on object.

SQL> GRANT object-priv [(column)] ON object TO user;

SQL> GRANT select, insert ON emp TO James;

SQL> GRANT select, update (e-name, e-address) ON emp TO James;

CHANGE PASSWORD :-

The DBA creates an account and initializes a password for every user. You can change password by using ALTER USER statement.

Syntax:

ALTER USER <some user name> IDENTIFIED BY
<new password>

Eg: ALTER USER James IDENTIFIED BY 'sam';

REVOKE:

Revoke Statement is used to remove privileges granted to other users. The privileges you specify are revoked from the users.

Syntax:

REVOKE [privilege ...] ON object FROM user

Eg:

• REVOKE create, select, insert ON emp FROM
James;

ROLE:

A role is a named group of related privileges that can be granted to user. In other words, role is a predefined collection of privileges that are grouped together, thus privileges are easier to assign user.

SQL> create role custom;

SQL> Grant select, insert on emp To custom;

SQL> Grant custom to James, Steve;

Questions:-

(1) Create user and implement the following commands on relation.

⇒ Create user vibha identified by 'CG05a';

(2) Develop a query to grant all privileges of employees table onto departments table.

⇒ Grant all privileges on employees to departments;

(3) Develop a query to grant some privileges of employees table onto departments table

⇒ Grant ~~all~~ select, insert, update, delete on employees to departments;

(4) Develop a query to revoke all privileges of employees table from departments table.

⇒ Revoke all privileges on employees from departments;

(5) Develop a query to revoke some privileges of employees table from departments table

⇒ Revoke select on employees from departments;