

Ex. No: 3**SQL DCL and TCL COMMANDS****Date: 01/02/22****AIM:** To write SQL queries to execute different DCL and TCL commands.

Data base created for this exercise is:

ID	NAME
1	a
2	b
3	c
4	d
5	e

DCL Commands:

- **Grant** - Used to give certain permissions for the table (and other objects) for specified groups/users of a database.

Syntax,**GRANT field_names on table_name to user_name;**

- **Revoke**- Used to take away permissions from groups/users.

Syntax,**REVOKE field_name on table_name to user_name;**

- **Deny** - Used to ban certain permissions from groups/users.

Syntax,**DENY field_name on table_name to user_name;****TCL Commands:**

- **Commit** - Used to permanently save any transaction into the database.

Syntax,**COMMIT;**

Example,

SQL> commit;

Commit complete.

- **Savepoint** - Used to temporarily save a transaction so that you can rollback to that point whenever required.

Syntax,**SAVEPOINT savepoint_name;**

Example,

SQL> savepoint A;

Savepoint created.

- **Rollback** - Used to restores the database to last committed state.

Syntax,**ROLLBACK to savepoint_name;**

Example,

```
SQL> rollback to B;
```

Rollback complete.

```
SQL> select * from emp;
```

ID	NAME
1	a
2	b
3	c
4	d
5	e

```
SQL> insert into emp values(6,'f');
```

1 row created.

```
SQL> commit;
```

Commit complete.

```
SQL> select * from emp;
```

ID	NAME
1	a
2	b
3	c
4	d
5	e
6	f

6 rows selected.

```
SQL> update emp set name='x' where id=3;
```

1 row updated.

```
SQL> savepoint A;
```

Savepoint created.

```
SQL> insert into emp values(7,'g');
```

1 row created.

```
SQL> savepoint B;
```

Savepoint created.

```
SQL> select * from emp;
```

ID	NAME
1	a
2	b
3	x
4	d
5	e
6	f
7	g

7 rows selected.

```
SQL> rollback to B;
```

Rollback complete.

```
SQL> select * from emp;
```

ID	NAME
1	a
2	b
3	x

4 d

5 e

6 f

7 g

7 rows selected.

SQL> rollback to A;

Rollback complete.

SQL> select * from emp;

ID	NAME
1	a
2	b
3	x
4	d
5	e
6	f

6 rows selected.

SQL> spool off

Result:

Thus the DCL and TCL commands are used to modify or manipulate data records present in the customer database tables.