

DCL (Data Control Language)

Data Control Language (DCL) is a subset of SQL (Structured Query Language) that is used to control access to data within a database. DCL commands are primarily used to grant or revoke permissions to users or roles, allowing database administrators to manage security and user access to database objects such as tables, views, and procedures.

DCL (Data Control Language)

```
SELECT USER FROM DUAL;
CREATE USER SCHOOL_USER IDENTIFIED BY 123;
DROP USER SCHOOL_USER;
GRANT CREATE SESSION TO SCHOOL_USER;

ALTER USER SCHOOL_USER IDENTIFIED BY abc123;

CREATE TABLE TEST (
    id NUMBER,
    name varchar(255)
);

GRANT CREATE TABLE to SCHOOL_USER;
DROP USER SCHOOL_USER CASCADE;
ALTER USER SCHOOL_USER QUOTA UNLIMITED ON USERS;
/*
This command is generally used by a database administrator (DBA)
to allow a user to create and store objects (like tables, etc.) \
Without sufficient quota, a user would encounter errors like ORA-01950:
no privileges on tablespace 'USERS' when trying to create or insert data
into database objects.
*/
```

DCL (Data Control Language)

```
INSERT INTO SCHOOL_USER.TEST (id, name) VALUES (1, 'eslam');  
DELETE FROM SCHOOL_USER.TEST;  
UPDATE SCHOOL_USER.TEST SET id = 1 WHERE id =1;  
SELECT * FROM SCHOOL_USER.TEST;
```

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```
--on SCHOOL_USER  
GRANT INSERT ON SCHOOL_USER.TEST to hr;  
  
GRANT DELETE ON SCHOOL_USER.TEST to hr;  
GRANT SELECT  ON SCHOOL_USER.TEST to hr;  
GRANT UPDATE  ON SCHOOL_USER.TEST to hr;  
GRANT ALL ON SCHOOL_USER.TEST TO HR;  
  
REVOKE INSERT ON SCHOOL_USER.TEST FROM hr;  
REVOKE SELECT ON SCHOOL_USER.TEST FROM hr;  
REVOKE UPDATE ON SCHOOL_USER.TEST FROM hr;  
REVOKE DELETE ON SCHOOL_USER.TEST FROM hr;  
REVOKE ALL ON SCHOOL_USER.TEST FROM HR;
```

DCL (Data Control Language)

```
--on admin
```

```
REVOKE CREATE Table FROM SCHOOL_USER;
```

```
REVOKE CREATE SESSION FROM SCHOOL_USER;
```