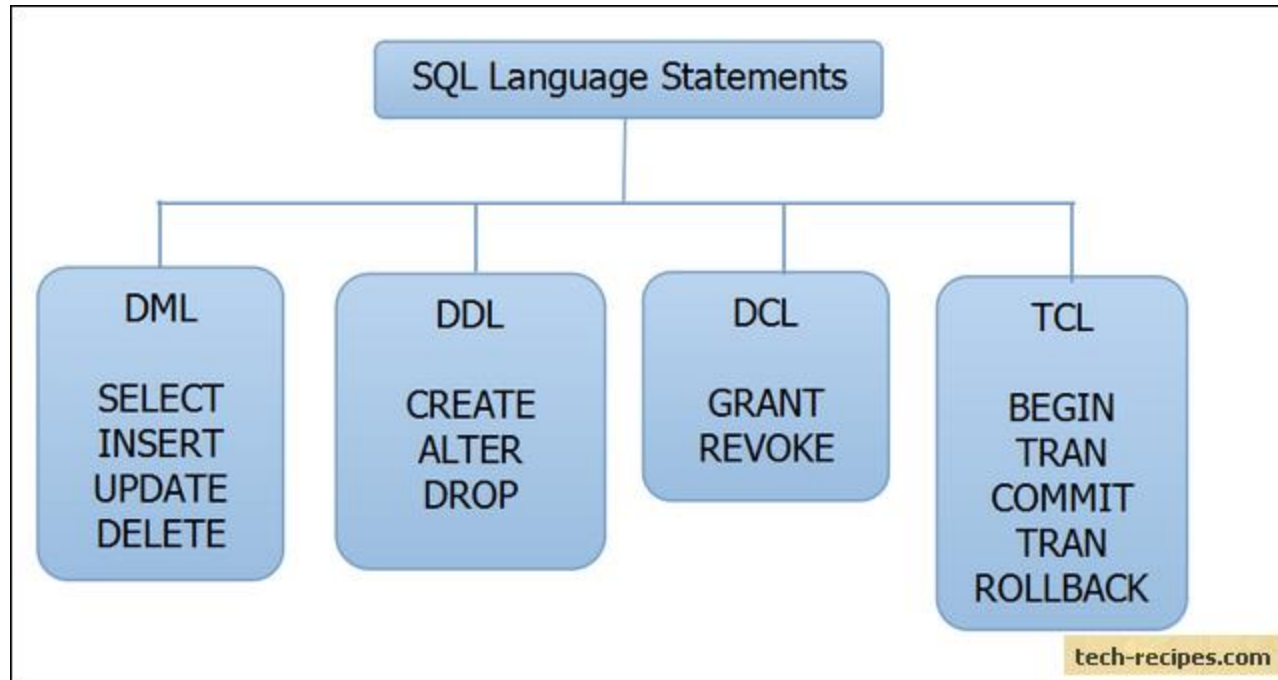


Database Lab 00

Introduction to Database and
General Discussion

SQL

- SQL is a standard language for storing, manipulating and retrieving data in databases.



DML

- **DML** is abbreviation of **Data Manipulation Language**.
 - It is used to retrieve, store, modify, delete, insert and update data in database.
 - SELECT – Retrieves data from a table
 - INSERT – Inserts data into a table
 - UPDATE – Updates existing data into a table
 - DELETE – Deletes all records from a table

DDL

- **DDL** is abbreviation of **Data Definition Language**.
 - It is used to create and modify the structure of database objects in database.
 - CREATE – Creates objects in the database
 - ALTER – Alters objects of the database
 - DROP – Deletes objects of the database
 - TRUNCATE – Deletes all records from a table and resets table identity to initial value.

DCL

- **DCL** is abbreviation of **Data Control Language**.
 - It is used to create roles, permissions, and referential integrity as well it is used to control access to database by securing it.
 - GRANT – Gives user's access privileges to database
 - REVOKE – Withdraws user's access privileges to database given with the GRANT command

TCL

- **TCL** is abbreviation of **Transactional Control Language**.
 - It is used to manage different transactions occurring within a database.
 - COMMIT – Saves work done in transactions
 - ROLLBACK – Restores database to original state since the last COMMIT command in transactions

DROP	TRUNCATE	DELETE	
حذف الجدول بالكامل	حذف جميع السجلات	حذف سجلات محددة	الغرض
إزالة الجدول من قاعدة البيانات	حذف كامل وسريع	حذف جزئي بناءً على شرط	الاستخدام
لا يمكن التراجع	لا يمكن التراجع	يمكن التراجع (مع المعاملات)	التراجع
يزيل بنية الجدول بالكامل	يحافظ على بنية الجدول	يحافظ على بنية الجدول	التأثير على البنية
سريع (إزالة كل شيء)	أسرع (إعادة تعيين الجدول)	أبطأ (حذف سجل كل على حدة)	الأداء