**Week 2**

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**What is SQL.**

SQL (Structured Query Language) is a standard programming language used to manage and manipulate relational databases. It allows users to create, modify, and retrieve data from databases, as well as perform tasks such as creating tables, defining relationships between tables, and setting up constraints to ensure data integrity. SQL is widely used in a variety of applications, from small websites to large-scale enterprise systems, and is supported by almost all modern database management systems (DBMS), such as MySQL, Oracle, and Microsoft SQL Server.

**What is DDL?**

DDL stands for Data Definition Language, which is a subset of SQL (Structured Query Language) used to create and modify the structure of database objects such as tables, indexes, constraints, and views.DDL statements are used to define the database schema, which describes the organization and layout of the database, including the data types, relationships between tables, and other constraints. Some common DDL statements include CREATE, ALTER, and DROP.

For example, the CREATE TABLE statement is a DDL statement used to create a new table in a database, while the ALTER TABLE statement is used to modify the structure of an existing table. The DROP TABLE statement is used to remove a table from the database.

**What is DML?**

DML stands for Data Manipulation Language, which is a subset of SQL (Structured Query Language) used to manipulate data stored in a database. DML statements are used to insert, update, and delete data in a table or view.

The most commonly used DML statements are:

INSERT: used to insert new rows into a table

UPDATE: used to modify existing data in a table

DELETE: used to remove data from a table

For example, you can use the INSERT statement to add new data into a table, the UPDATE statement to change the values of existing data, and the DELETE statement to remove unwanted data from the table.

**What is DQL?**

DQL stands for Data Query Language, which is a subset of SQL (Structured Query Language) used to retrieve data from a database. DQL is used to construct queries that allow users to search, filter, and sort data stored in a database. The most commonly used DQL statement is the SELECT statement, which is used to retrieve data from one or more tables in a database. The SELECT statement allows users to specify the columns they want to retrieve, filter the data using conditions, sort the data by one or more columns, and group the data by one or more columns. For example, you can use the SELECT statement to retrieve all the records from a table, or you can use it to retrieve specific records that match certain criteria. You can also use the SELECT statement to retrieve data from multiple tables by joining them together.