**1.Difference between SQL and MySQL:**

SQL -Structured Query Language is a programming language designed for managing and manipulating relational databases. It is a standard language for interacting with databases.

MySQL, on the other hand, is a relational database management system -RDBMS that uses SQL as its query language. MySQL is one specific implementation of a database system, while SQL is the language used to communicate with various database systems, including MySQL.

**2.Different subsets of SQL:**

SQL itself is a comprehensive language, but it can be categorized into several subsets:

**DDL -Data Definition Language:** Deals with the structure of the database, creating and modifying tables and schemas.

**DML -Data Manipulation Language:** Involves operations like querying, inserting, updating, and deleting data within the database.

**DCL -Data Control Language:** Concerned with access permissions and security, managing user privileges.

**TCL -Transaction Control Language:** Manages transactions in a database, including committing or rolling back changes.

**3.DBMS -Database Management System:**

A DBMS is software that facilitates the creation, organization, and manipulation of databases. Different types of DBMS include:

**Relational DBMS -RDBMS:** Organizes data into tables with predefined relationships between them -e.g., MySQL, PostgreSQL, Oracle.

**NoSQL DBMS:** Handles unstructured or semi-structured data and doesn't necessarily rely on the traditional tabular relational database structure -e.g., MongoDB, Cassandra.

**Object-Oriented DBMS -OODBMS:** Stores data as objects, making it suitable for object-oriented programming -e.g., db4o.

**Hierarchical DBMS:** Organizes data in a tree-like structure -e.g., IMS.

**Network DBMS:** Allows more complex relationships between data, using a network model -e.g., IDMS.

**4.SQL:**

SQL -Structured Query Language is a domain-specific language used for managing and manipulating relational databases. It includes commands for querying, updating, and managing data within a relational database system.

**5.Primary purpose of SQL:**

The primary purpose of SQL is to provide a standard language for interacting with relational databases. It allows users to perform various operations, such as querying data, inserting, updating, and deleting records, creating and modifying database structures, and managing user access and permissions.

**6.Difference between a database and a table:**

A database is a collection of organized data, while a table is a structured format for organizing data within a database. In other words, a database can contain multiple tables, each of which stores data in rows and columns.

**7.DDL -Data Definition Language:**

DDL comprises SQL commands that define, modify, and remove database structures. Examples include CREATE, ALTER, and DROP statements used for creating tables, altering their structure, or deleting them.

**8.DML -Data Manipulation Language:**

DML includes SQL commands for manipulating and interacting with data stored in the database. Common DML operations include SELECT, INSERT, UPDATE, and DELETE statements.

**9.DCL -Data Control Language:**

DCL involves SQL commands related to access control and permissions. Examples include GRANT -to give privileges and REVOKE -to take away privileges.

**10.**

**RDBMS -Relational Database Management System:**

RDBMS is a type of DBMS that organizes data into tables with predefined relationships between them. It ensures data integrity and provides a structured way to manage and interact with relational databases. MySQL is an example of an RDBMS.