

A **database** is a collection of information. This information is stored in a very structured manner. By exploiting this known structure, we can access and modify the information quickly and correctly.

There are many places that databases enter your life. The idea is that they are everywhere. And, each database requires some way for a user to interact with the information within. Such interaction is performed by a **database management system (DBMS)**.

The tasks of a DBMS are really quite simple. In concept, there are only a few things you can do with a database:

1. View the data
2. Find some data of interest
3. Modify the data
4. Add some data
5. Delete some data

The database is stored in one or more well-defined **tables**.

The **rows** in a database table are used to describe similar items. The rows are referred to as database **records**. In general, no two rows in a database table will be alike.

The **columns** in a database table provide characteristics of the records. These characteristics are called database **fields**. Each field contains one specific piece of information. In defining a database field, you specify the data type, assign a length, and describe other attributes.

"A **relational database** is a collection of data items with pre-defined relationships between them. These items are organized as a set of tables with columns and rows. Tables are used to hold information about the objects to be represented in the database. Each column in a table holds a certain kind of data and a field stores the actual value of an attribute. The rows in the table represent a collection of related values of one object or entity. Each row in a table could be marked with a unique identifier called a **primary key**, and rows among multiple tables can be made related using **foreign keys**. This data can be accessed in many different ways without reorganizing the database tables themselves."

Resources:

To learn more about Relational Database, check out <https://aws.amazon.com/relational-database/>