A collection of related pieces of data, whose purpose is to solve the data management needs of an institution is called a **Database**. [Database Management Systems (DBMS)](https://www.geeksforgeeks.org/dbms/), on the other hand, are very complex software that save the data on the secondary storage devices and which are used to manipulate databases.

**Difference between Database and DBMS:**

| **S. No.** | **Category** | **Database** | **DBMS** |
| --- | --- | --- | --- |
| **1.** | **Definition** | A database is a collection of connected information about people, locations, or things. | A database management system (DBMS) is a collection of programs that allow you to create, manage, and operate a database. |
| **2.** | **Storage** | Besides computers, databases can even be maintained in physical ledgers, books, or papers. | In a database management system (DBMS), all the records are maintained only on a computer. |
| **3.** | **Data Retrieval** | The retrieval of information from the databases can be done manually, through queries, or by using programs (C, C++, Java, etc.). | We can retrieve the data from the database management system through queries written in SQL. |
| **4.** | **Speed** | As databases can be handled manually or via computers, when SQL is not used to retrieve information, it can be very slow. | As a computer system is involved in a database management system, the retrieval of information is very quick. |
| **5.** | **Access** | The databases are not designed for a large number of people who can access data at the same time, rather it is designed for a very small number of people (preferably few people) who access data at different times. | The database management system is designed for a large number of people who can access the data at the same time. |
| **6.** | **Data** | Data is stored in databases. | A database management system (DBMS) manages and manipulates data. |
| **7.** | **Data Manipulation** | In the case of the databases, very less information can be modified at a time. | In the database management system (DBMS), a lot of information can be changed at one time (as it can have many users using it at the same time). |
| **8.** | **Backup and Recovery** | The databases do not ensure that the data will be available after failure arises. | The database management system (DBMS) ensures that the data will always be available even after system failures. |