



LET'S LEARN DATABASE MANAGEMENT SYSTEM (DBMS)

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SQL

DATA & INFORMATION



Data : Data refers to a collection of raw facts or figures that can be processed to derive meaning or knowledge. In easier terms we can say any fact that can be stored. *Ex- XYZ, 12*

Information : Processed data is called information.
Ex- Your name, temperature, etc.

DATABASE

Collection of interrelated data is called a database.

- It can be stored in the form of table
- It can be any size

Multimedia database

College database



img+video

staff+student

EXAMPLE

ID	Name	subject
1	Rahul	PHE
2	Raj	ECO
3	Riti	IT

ID	Name	Place
1	Rahul	DELHI
2	Raj	KOLKATA
3	Riti	MUMBAI



The diagram illustrates the relationship between two separate data tables and a unified data collection. On the left, a purple table lists individuals (Rahul, Raj, Riti) and their subjects (PHE, ECO, IT). On the right, a blue table lists the same individuals and their locations (DELHI, KOLKATA, MUMBAI). White curved arrows from both tables point towards a central orange rounded rectangle labeled 'Collection of related data', indicating that the data from both tables is being combined into a single dataset.

Collection of related data

FILE SYSTEM

An operating system's approach for organising and storing data on storage units like hard drives is called a file system.

In a file system, data is organised into files.

The major disadvantage of file system is

- Data redundancy
- Poor Memory utilisation
- Data inconsistency
- Data security

DATABASE MANAGEMENT SYSTEM

The acronym DBMS stands for "Database Management System."

Users can access databases, save data, retrieve it, update it, and manage it safely and effectively with the use of a software program or combination of programs.

The presence of rules and regulations in the management system is crucial as they are necessary to uphold and maintain the database effectively.

APPLICATION OF DBMS

- Schools and Colleges



- Banks



- Airlines



APPLICATION OF DBMS

- Schools and Colleges – DBMS is used to create and maintain a student information system that stores student records, including personal details, academic performance, attendance, and extracurricular activities.
- Banks – DBMS is used to maintain a centralised and secure database of customer information, including personal details, account numbers, contact information, and transaction history.