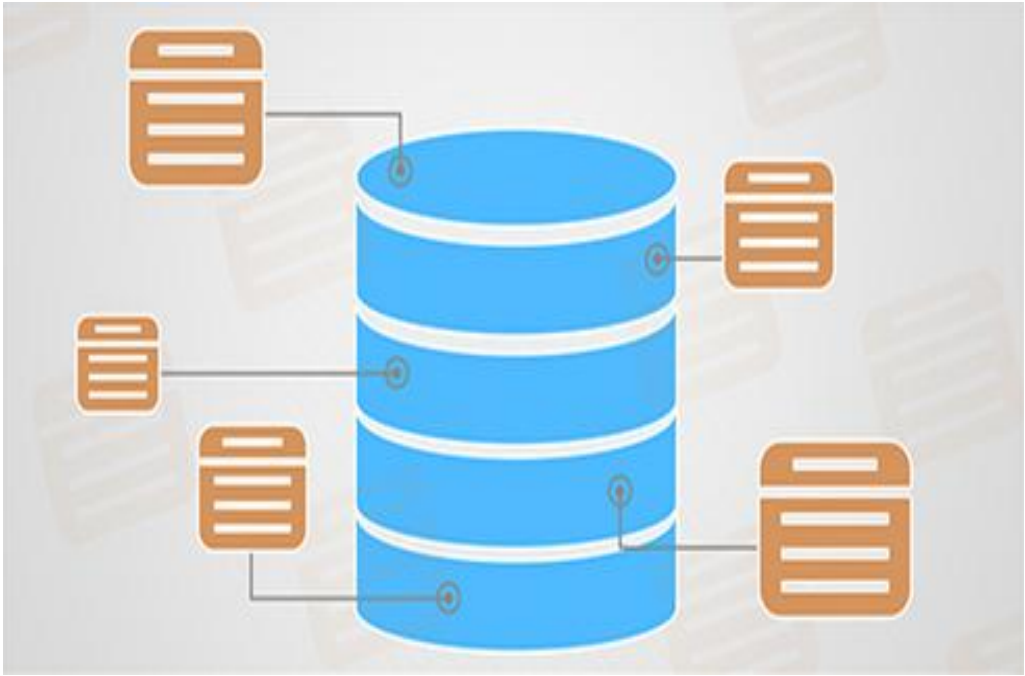
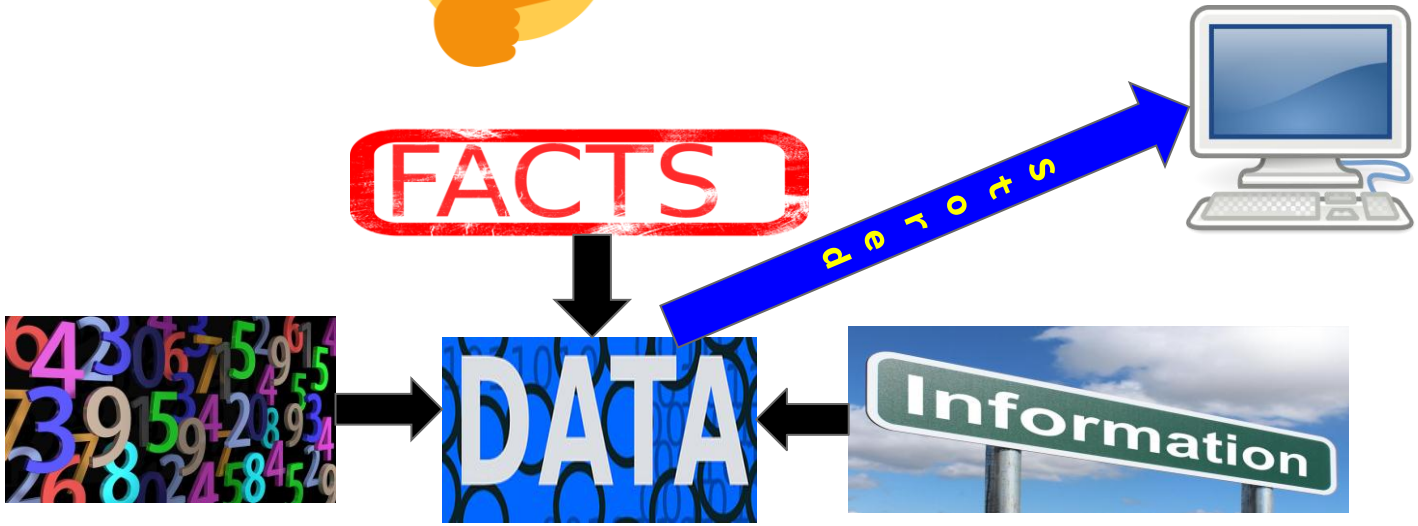
Database System



Introduction to DBMS

What is Data?



Introduction to DBMS

What is Database?

Database is a organized collection of data

Example:

★ University database.
★ College database.

Introduction to DBMS

What is DBMS?

DBMS stands for **D**ata**b**ase **M**anagement **S**ystem.

DBMS is a software which is use to manage the data in the database.

Introduction to DBMS

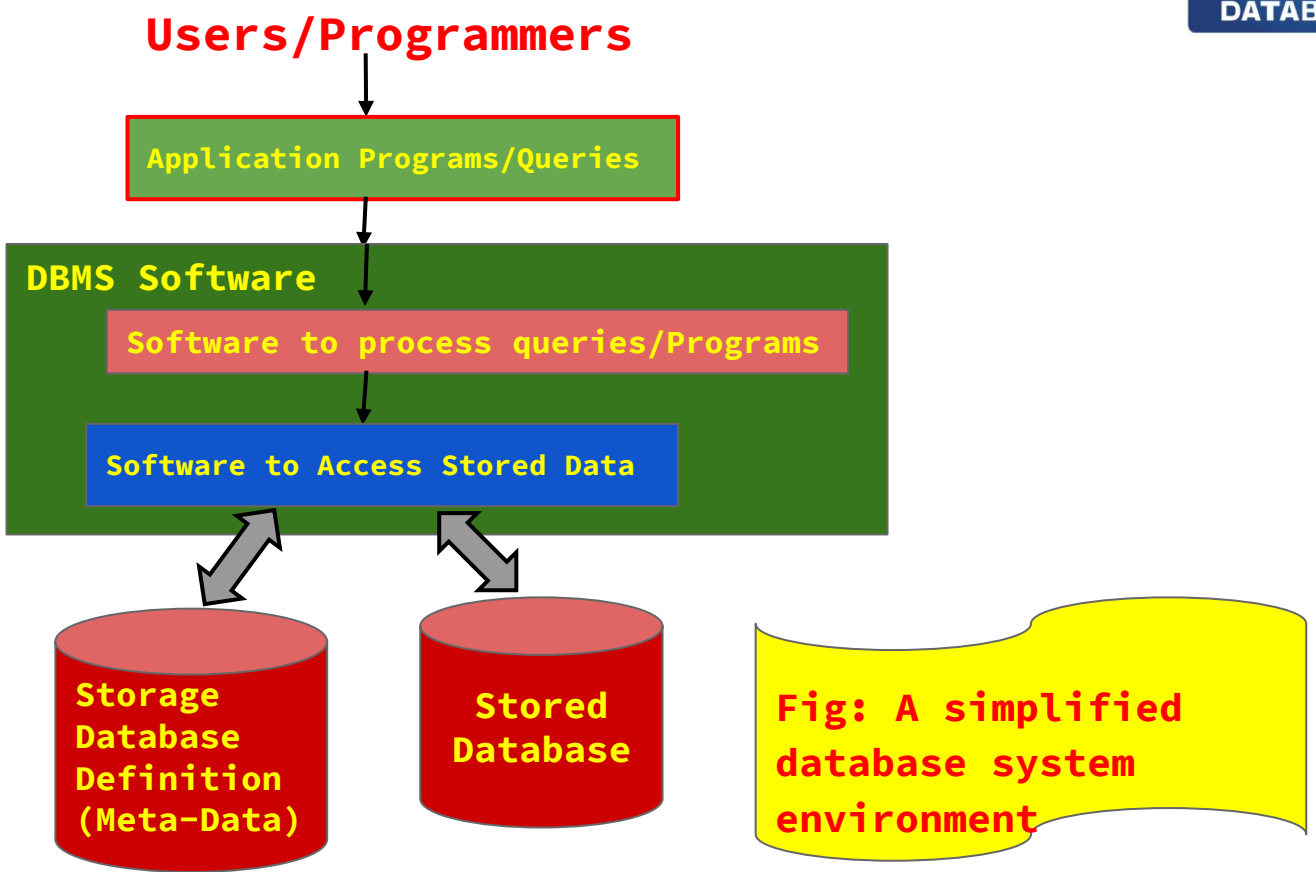


Fig: A simplified database system environment

Introduction to DBMS

Characteristics of Database:

- ★ Self-describing nature of a database system
- ★ Insulation between programs and data, and data abstraction
- ★ Support of multiple views of the data
- ★ Sharing of data and multi user transaction processing

Introduction to DBMS

Actors on the scene:

The people whose jobs involve the day-to-day use of a large database; They are called as "actors on the scene"

Database Designers

Introduction to DBMS

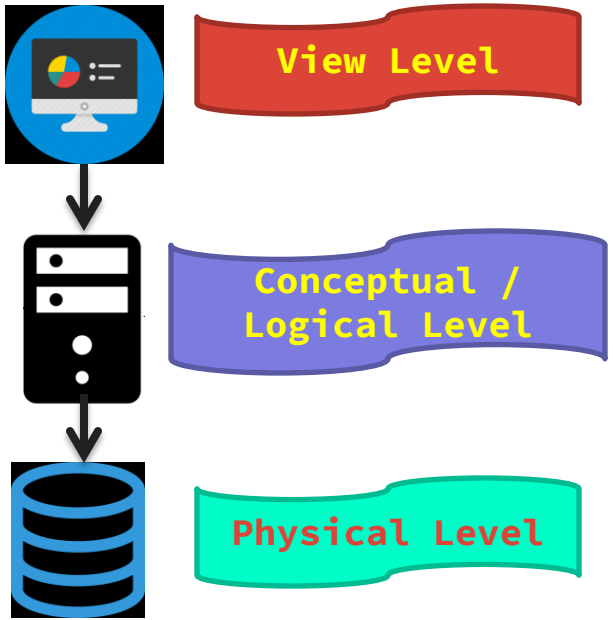
Advantages of Using The DBMS Approach:

- **Controlling Redundancy**
- **Restricting Unauthorized Access**
- **Providing Backup and Recovery**
- **Providing Multiple User Interfaces**

Introduction to DBMS

Data abstraction: The process of hiding irrelevant deta
from user is called data abstraction.

Levels of abstraction:



Introduction to DBMS

Data Independence:

Data Independence can be defined as the capacity to change the schema at one level of a database system without having to change the schema at the next higher level.

Types: