

Topic – Introduction of Database

A database is a collection of related information which is available to many users for different purpose in organized form.

The content of a database is obtained by combining data from all the different sources in an organization. So that data are available to all users and redundant data can be eliminated or at least minimized.

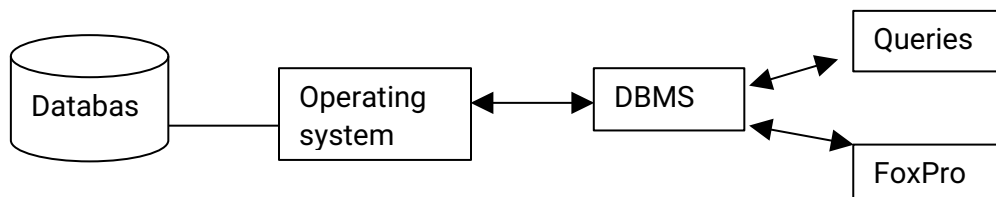
A database can handle business inventory, accounting and filing and use the information in its files to prepare summaries, estimates and other reports.

A database management system (DBMS) is a software system that allows access to data contained in a database.

The objective of the DBMS is to provide a convenient and effective method of defining, storing and retrieving the information contained in the database.

Database management system has the following facilities or capabilities:-

- i. Creating of a file, addition to data, deletion of data, and modification of data.
- ii. Retrieving data collectively or selectively.
- iii. The data stored can be indexed at the user's direction.
- iv. Various reports can be produced from the system.
- v. Mathematical functions can be performed and the data stored in the database can be manipulated with these functions to perform the desired calculations.
- vi. To maintain data integrity and database use.



Modern DBMS comes with many different classifications and with many different processing capabilities. DBMS try to affective three things –

- i. Data Consolidation – It refers to the combine of separate data files into a centralized structure and storing the data in a non – redundant format.

A non – redundant format is a structure that stores the data item in one

location.

- ii. Data sharing – It refers to the abilities of the system to allow multiple users access to individual pieces of data in the database.

- iii. Data protection – It refers to the ability of a DBMS to maintain the integrity of its data in the face of certain types of processing adversity like system crash, program failure etc.

If these types of events occur, the DBMS must have the ability to recover losses data.