Before knowing database one must know about data.

Data

In simple words data can be facts related to any object in consideration. For example your name, age, height, weigh, etc are some data related to you. A picture , image , file , pdf etc can also be considered data. So data is everything which needed memory or in device.

Database

Database is a systematic collection of data. Or we can say a database is a collection of information that is organized so that it can be easily accessed, managed and updated.

- In Database a data is organized into rows, columns and tables.
- In database data is indexed to make it easier to find relevant information.
- In Database data gets updated, expanded and deleted as new information is added.
- Databases process workloads to create and update themselves, querying the data they contain and running applications against it.

In Database access to data is usually provided by a “database management system” (DBMS).

A DBMS is an integrated set of computer software that allows users to interact with one or more databases and provides access to all of the data contained in the database.

Some examples of Database software programs are:

1. Microsoft Access.
2. Microsoft Excel.

3. Microsoft SQL Server.
4. MySQL.
5. Oracle RDBMS.

Why do we need Database?

The various reasons for which we require databases are:

- To manage large amount of data.
- To manage the accuracy.
- It provides ease of updating data.
- Databases provides security groups and permission to data.
- Databases assured of accuracy and consistency of data due to the built in integrity checks and access controls.

Some applications using database:

1. Facebook
2. Amazon
3. eBay
4. Microsoft Access
5. Wikipedia
6. YouTube
7. Airlines ticket systems
8. IRCTC
9. Flipkart
10. Snapdeal