SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

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Approvedy by AICTE, New Delhi, Recognized by UGC, Affiliated to Anna University, Chennai

Department of MCA

DBMS Introduction

Course Name : 23CAT603 - DATA BASE MANAGEMENT SYSTEM

Class : I Year / II Semester
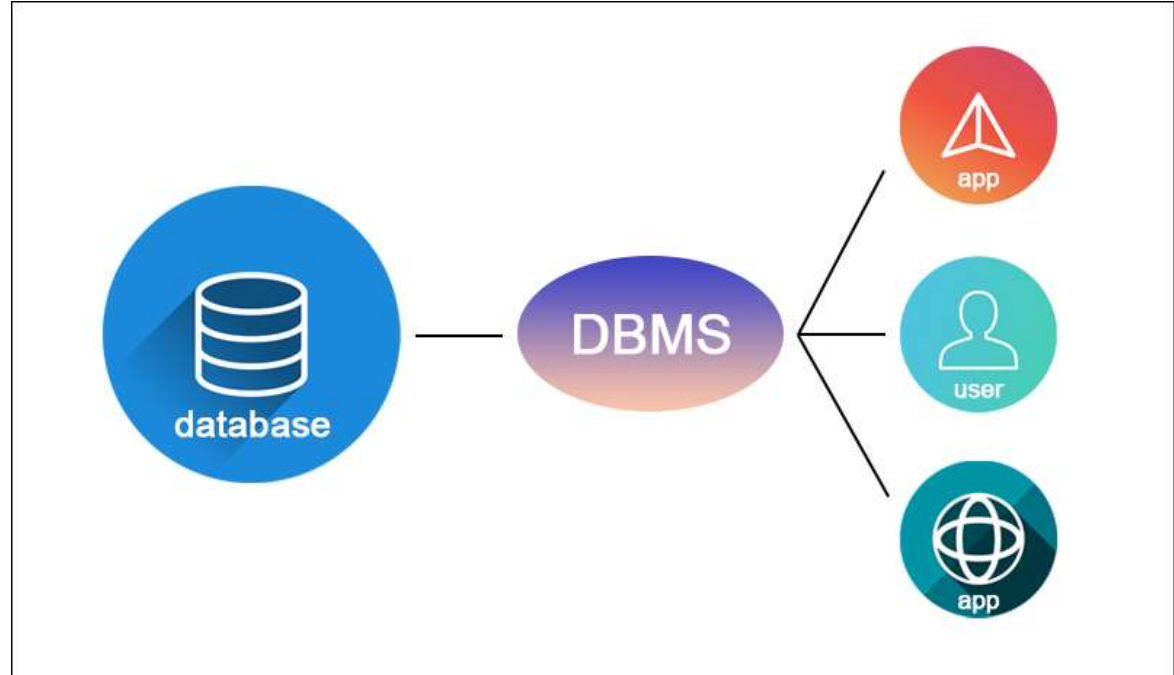
Unit I - Introduction

Agenda

- **Data**

- **Database**

- **Information**
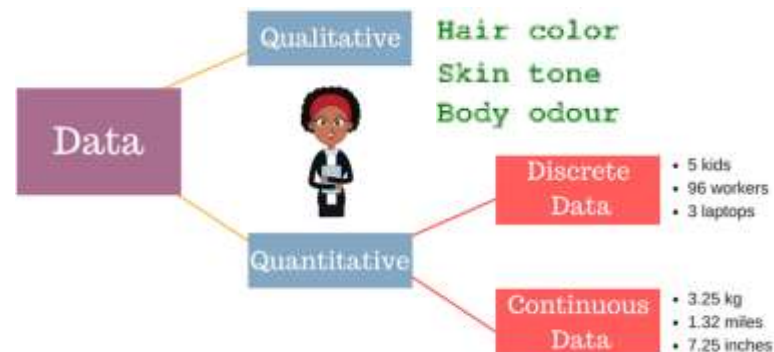
- **DBMS**

- **RDBMS**

Data

- Facts that can be recorded

- Numbers, Letters, Symbols, Audio, Video, images

- Data is the raw material that can be processed for any computing machine.

- For example – Employee name, Product name, Name of the student, Marks of the student, Mobile number, Image etc.

Database

Collection of related data that represents some real world entities
Database : an organized collection of data and information or interrelated data collected at one place.

A database is **an organized collection of structured information, or data**, typically stored electronically in a computer system.

MySQL, SQL Server, MongoDB, Oracle Database, PostgreSOL. Informix. Svbase. etc. are all examples of different databases.
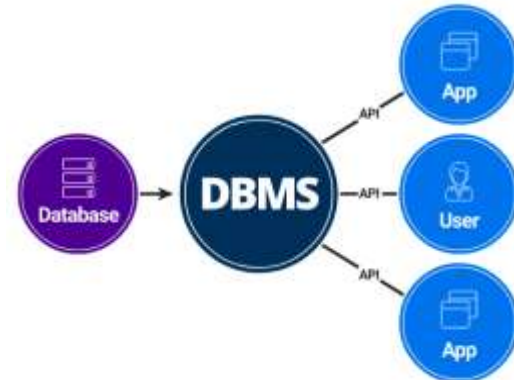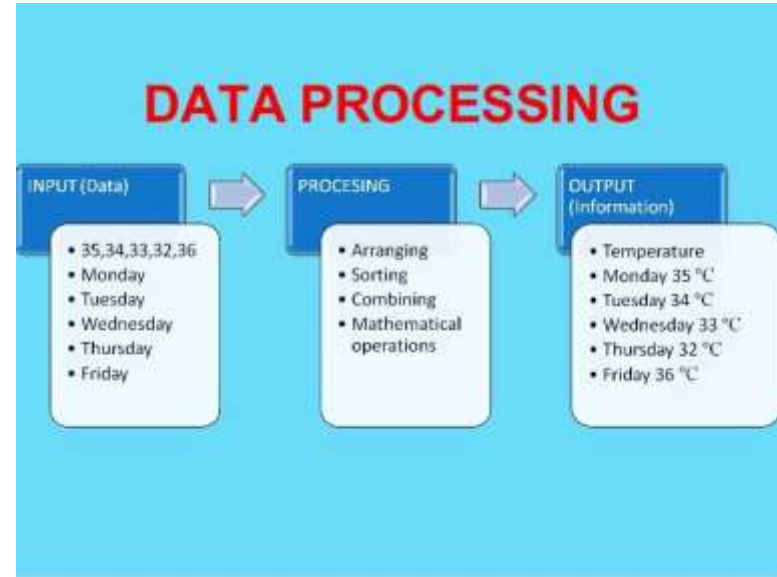
Information

Information is the data that has been converted into more useful or intelligent form.

> For example: Report card sheet.

The information is needed for the following reasons:

- To gain knowledge about the surroundings.

- To keep the system up to date.

- To know about the rules and regulations of the society.

DBMS

DBMS is Database Management system.

It is a system that manages database means DBMS helps the users to access the database easily where users can easily store, modify and extract information as per the requirements.

Popular database management systems

1 MySQL
2 MariaDB
3 Microsoft SQL Server
4 Oracle DBMS
5 PostgreSQL
6 MongoDB
7 Redis
8 IBM DB2
9 Elasticsearch
10 SQLite
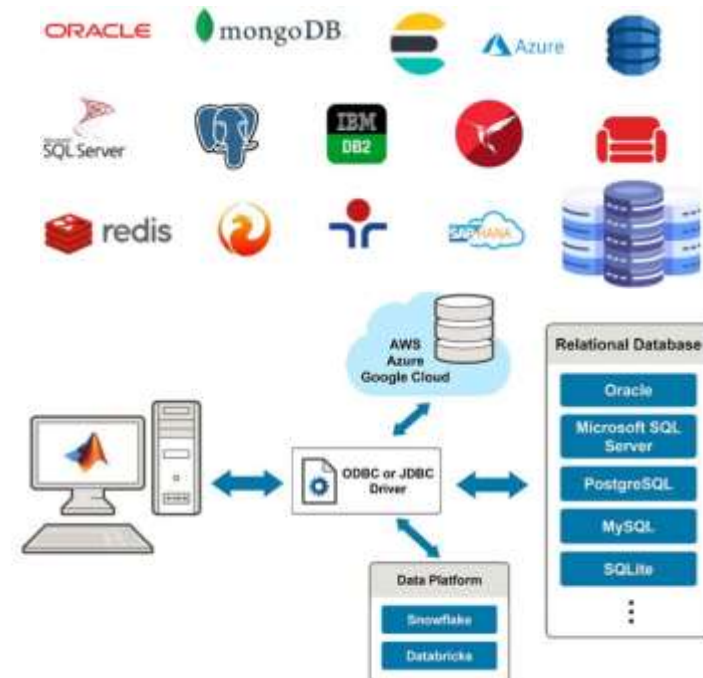
DBMS

DBMS is Database Management system. List of DBMS Software

DBMS

Database + DBMS = Database System ; Software tool to manage the data.

Hadoop Environment /16CA816- BIG DATA ANALYTICS / Dr. S.Sundararajan / MCA/SNSCT   •
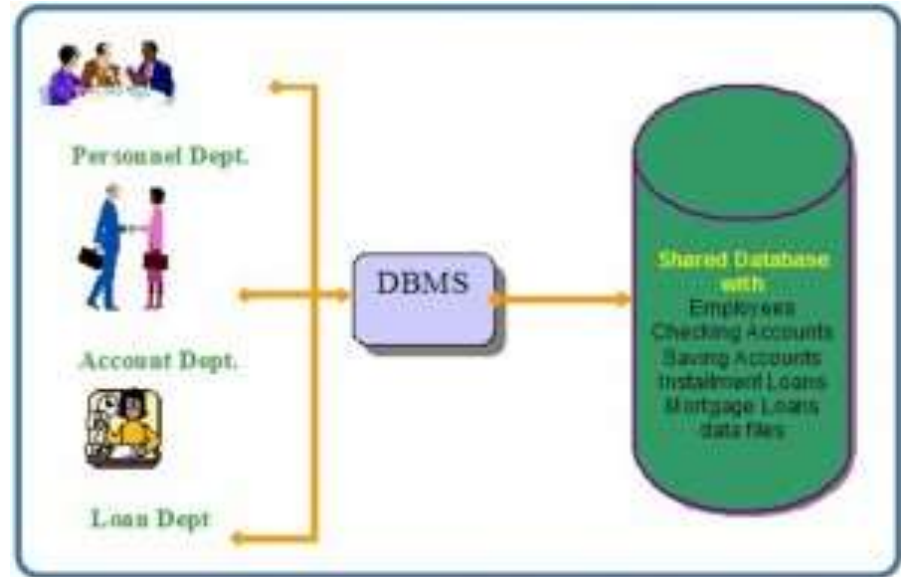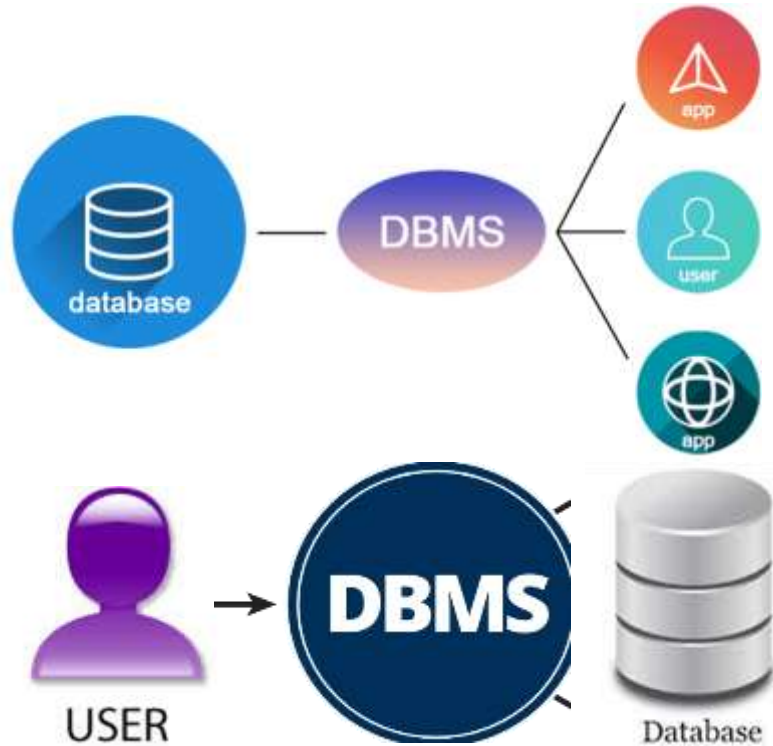
DBMS

Need or Purpose

Handling large amount of data

- **Storage of data**

- **Retrieval of data**

Applications of DBMS

- **Airlines**

- **Railways**

- **Telecommunications**

- **Finance**

- **Medical**
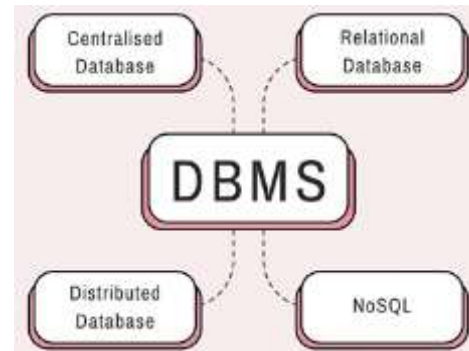
DBMS Vs RDBMS

Relational Database Management System

- The data is stored in the form of tables or relations.

- The relations are also known as tables

- The data is stored in the form of tables.

- Tables are having some relationship among them.

- One table is related to another table that's why it is called as relational database management system.

DBMS & RDBMS

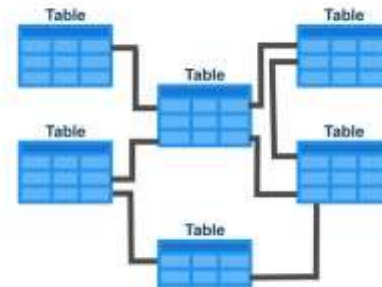| ROWS	COLUMN ID	NAME	USERNAME
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	2	Priya	Priya
	3	Kamesh Dubey	Kameshdubey
	4	Ruby	Ruby
	5	Jatinder kaur	Jatinder_kaur
	6	Jogeshwar	Jogeshwar

Files

Rows and Columns

DBMS VS RDBMS

DBMS

RDBMS

References

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