

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

DBMS

UNIT-I

(Data Base Management System)

Data Base Concept :- A database is defined as a collection of interrelated data stored together to serve multiple application. it is composed of a collection of files.

field :- A set of characters which are used together to represents a specific data elements are known as field.

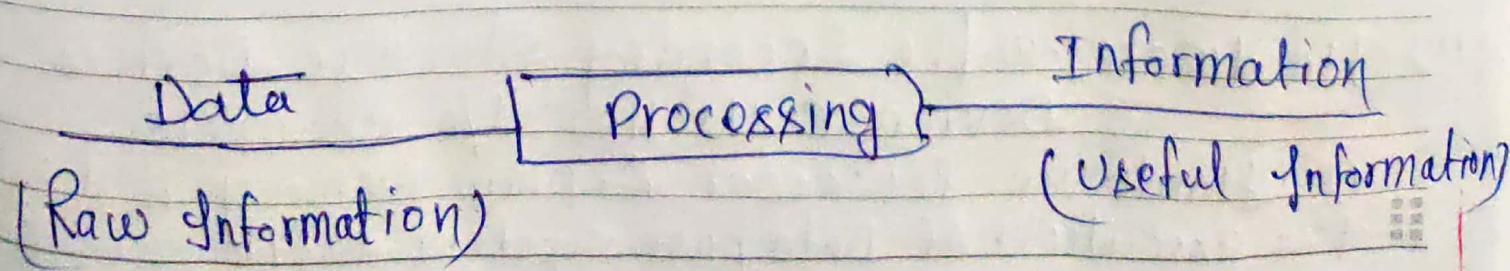
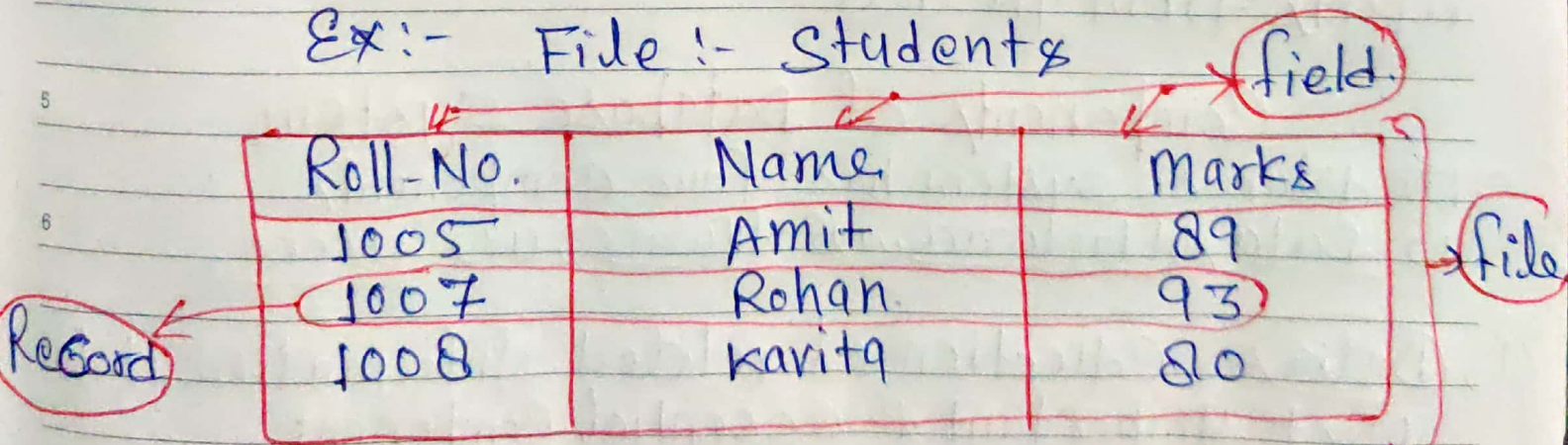
Eg - Roll_No. (Roll No of students)

Records :- Collection of field is called Record.
E.g. Roll_No, Name, marks (the class Record for a student contains)

file :- Collection of Records is called a file.

Ex :- File :- Students

Roll-No.	Name	Marks
1005	Amit	89
1007	Rohan	93
1008	Kavita	80



S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Database & its Purpose

A Shared Collection of logically related data and a description of this data, designed to meet the information needs of an organization.

A DBMS is general purpose s/w system that facilitates the process of

(i) Defining (ii) Constructing (iii) manipulating

- (i) Defining a database involves specifying the data types, structures and constraints for the data to be stored in the database.
- (ii) Constructing the database is the process of storing the data that is controlled by DBMS.
- (iii) manipulating a database includes such functions as querying the database to retrieve specific data, updating the database to reflect changes & generating reports from the data.

Components of Database System

The database system has four components

(i) Data, (ii) hardware, (iii) software, (iv) users

(i) Data - Collection of related information, it is most important & essential component.

(ii) Hardware - (a) the secondary storage devices, device controller, I/O channels.

(ii) Hardware processor & main memory that support the execution of database system software.

2	S	M	T	W	T	F	S
0							1
2	2	3	4	5	6	7	8
2	9	10	11	12	13	14	15
0	16	17	18	19	20	21	22
0	23	24	25	26	27	28	29

③ Software :- All Requests for access to database are handled by the DBMS

④ Users - This Component include all type of users who derive the benefits of getting their work done by the DBMS. Users are four types

- ✓ (i) Database designers
- ✓ (ii) End users
- ✓ (iii) Database administrator (DBA)
- ✓ (iv) System analyst & Application programmers.

