

DATA BASE MANAGEMENT SYSTEM

INTRODUCTION

A data base is a collection of data that can easily organized ,accessed ,managed and update.

OR

A data base is a collection of related information stored, so that it is available to many users for different purpose that is accessed, managed and update .

Data Base Management System

- A data base management system is a combination of hardware and software that can be used to set up and monitor a data base and can manage to update and retrieval (recall)of data base that has been stored in it.
 - **OR**
- DBMS is a system software supplied by vendors which helps in managing the data base .

ADVANTAGE OF DBMS

- 1.Reduction of Redundancies
- 2.sharing data
- 3. Data Integrity
- 4. Data security
- 5. Conflict Resolution
- 6. Data Independence :-
 - I).Physical Data Independence
 - II). Logical Data Independence

DISADVANTAGE OF DBMS

- 1. Problem associated with centralization
- 2. cost of hardware and software
- 3. Complexity of Back up and recovery.

THREE LEVEL ARCHITECTURE OF DBMS

- We have extract the data from data base in three levels corresponding to three view this is known as **ANSI/SPARC Model**.
- **I). External level:-**It is known as user view or view level.It is the heighest level of data base abstraction.
- **II). Conceptual level:-**It is also known as global view.
- **III). Internal Level:-** It is the lowest level of data abstraction .This level is also known as physical level.

DBMS FACILITIES

- There are three types of facilities provided by DBMS.
- **Data Definition Language (DDL):-** It provides facilities for defining the structure in which data is to be store on physical devices. Which consist on those command that create the objects like table , index ,view etc. in the data base Create, Drop and Alter are few commands of Data Definition Language.

DBMS FACILITIES

- **Data Manipulation Language (DML):-** It provides facilities for entering , changing and extracting data from the data base. Data Manipulation Operation is also called Query and DML is also called a Query Language. Select, Delete , Insert ,Update are few commands of Data Manipulation Language.

DBMS FACILITIES

- **Data Control Language (DCL):-**DCL is another facilities of DBMS that provides security mechanism or scheme for protecting data from an authorized access. Grant , Revoke are few commands of Data Control Language.
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FILE MANAGEMENT SYSTEM IN DBMS

- In early day of data processing , all files were flat files . A flat file is one wher each record contains the same type of data items. One or more of these data items are designed as thekey and is used for sequenting the file and for locating and grouping the record by sorting and indexing.
- **TYPES OF FILE IN DATA BASE**

FILE MANAGEMENT SYSTEM IN DBMS

- **1.HIERARCHICAL DBMS** :- The DBMS based on hierarchical data model is known as hierarchical DBMS. Its structure is same as Tree like structure to represent relationship among records in this model records are linked in form of organization chart. It shows parent child relationship , but is does not represent all relationship that occur in real life situation.

FILE MANAGEMENT SYSTEM IN DBMS

- **2. NETWORK DBMS:-** The DBMS based on Network data model are known as network DBMS. In this data model Data is Represented by records using links among together . In network data model a record can have multiple owners. It shows the relationship that occur in real situation ,but the whole data base structure become very complex.

FILE MANAGEMENT SYSTEM IN DBMS

- **3. RELATIONAL DBMS** :-The DBMS based on the relational model are known as relational DBMS.It represents in the form of row and column similar to a table .It is necessary in the relational model ,the data items are arranged in table, which indicate the structure , relationship and integrity .

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