

Introduction to DBMS:- A Database Management System (DBMS) is a software that allows users to define, create, maintain, and control access to database. It serves as an interface between users and the database, ensuring data is consistency organized and remains easily accessible. DBMS provides various functions such as data storage, retrieval, security, backup, and concurrent access control.

Define the following terms:-

- (i) Data:- Raw, Unprocessed facts and figures without any context.
- (ii) Information:- Processed or organized data that has meaning and value.
- (iii) Database:- A structured collection of related data stored and accessed electronically.
- (iv) Field:- A single piece of data or attribute or a column of a table.
- (v) Record:- A complete set of fields or row in a table.
- (vi) Query:- A request to access or manipulate data in a database.
- (vii) Candidate Key:- A set of fields that can uniquely identify records in a table.
- (viii) Primary Key:- The main candidate key selected to uniquely identify records in a table.
- (ix) Foreign Key:- A field in one table that links to the primary key in another table, creating a relationship between the two.

Define the following terms

1) DDL (Data Definition Language):- Commands that define the database structure.

eg. CREATE, ALTER, DROP

2) DML (Data Manipulation Language):- Commands that handle data operations. Its commands are INSERT, UPDATE, DELETE, SELECT

3) DCL (Data Control Language):- Commands to control access and permission. Its commands GRANT, REVOKE

4) Composite key:- A key made from two or more field to uniquely identify a record

5) Alternate key:- Other candidate keys not chosen as the primary key

6) Super key:- A set of one or more attributes that uniquely identify a record. It may include extra fields.

7) Difference Between DBMS and RDBMS

DBMS	RDBMS
1) Store data as files or tables	1) Stores data in related tables
2) Doesn't support relationship between data.	2) Supports relationships using foreign keys.
3) NO strict rules for integrity	3) Enforce data integrity using foreign keys.
4) Suitable for smaller datasets	4) Suitable for larger data set.

Conclusion:- In this labwork of database and DBMS where we used XAMPP for ~~initial~~ initializing the localhost server for the database. Then we created databases and inside the databases we created table and gave them a definition about their structure and containing data. later we used various commands (DML, DDL) to get data ~~from~~ from the database we made. We mainly used DML (Data manipulation) language to get data from the database. It is ~~was~~ very easy and conceptual labwork experinece to perform. ~~the~~