

Name - Shivam Shukla  
Roll No. - 202410101200132

Topic :- DBMS

1. DBMS stands for Database Management System, a software designed to manage and organize data efficiently.
2. It helps users to store, retrieve, update and delete data easily without worrying about the underlying structure.
3. It is acting as an interface between the database and the users, it simplifies data handling and access.
4. A DBMS ensures data security, integrity and consistency across all operations.
5. It also helps to reduce data redundancy and improves data sharing among multiple users.
6. Data in a DBMS is organized in tables consisting of rows and columns.
7. If we want to interact with this data, then we have SQL for queries and commands.
8. The system efficiently handles large volumes of data used in organizations and applications.
9. Relationships between data are maintained using primary keys, foreign keys and constraints.
10. DBMS provides backup and recovery feature to protect our data from loss and corrupted corruption.
11. It allows multiple users to access same data at same time, without conflict.

12. There are several types of DBMS including Hierarchical, Network Relational, Object-oriented Systems, etc.
13. Among these, RDBMS (Relational Database Management System) is widely used across the world.
14. For a good DB database we follow concepts like Normalization, Functional Dependencies, ER-diagram<sup>and</sup> follow ACID properties.
15. Examples of DBMS includes, MySQL, PostgreSQL, MongoDB, Oracle, etc.