

Chapter 9

Introduction to Database Management System

1. All kinds of facts, figures and details related to people, places, things or events are known as **data**.
2. Data must be processed in a proper way to generate the useful and meaningful **information**.
3. **Database** is a collection of related data items stored in an organized manner.
4. The structure of database is known as **data model**.
5. **Data model** describes way of storing and retrieving the data.
6. There are 3 different data models **hierarchical data model, network data model and relational data model**.
7. RDBMS stands for **Relational Database Management System**.
8. **Oracle, DB, SQL server, MYSQL, MS Access, Base** is the example of DBMS.
9. The **relational** model is centered on idea like: “The organization of data into collections of two-dimensional tables called “relations””.
10. Base is a collection of related data objects known as **Tables, queries, Reports and Application Modules**.
11. All tasks related to database handling is known as **database management**.
12. **Table** is the basic unit for storing data in database designed using Base.
13. **Entities** are real world objects about which information is to be stored in database.
14. **Attributes** of an entity are represented in the form of columns.
15. **Form** is an object which allows entering the data in the table and editing or deleting existing data in the table.
16. A question asked within the database environment is known as **Query**.
17. **Query** displays subset of data contained in various tables of a database.
18. The presentation of information in an organized and readable format as per the user requirement is known as **Reports**.

19. Attributes (Fields) can be defined as characteristics of an **entity**.
20. Attribute (field name) always start with a **letter** and for subsequent characters use either letters, numbers or the underscore character.
21. In attribute (Field name) name, do not use special characters except **underscore**.
22. **Data type** is a way to define storage structure of the field.
23. Data types available in Base can be divided into three categories. **Alphanumeric type, calendar type and Binary type**.
24. **Alphanumeric** data type consists of letters, numbers as well as special character.
25. **Memo** data type allows us to store any text data up to 64,000 characters.
26. Base used **UTF-8** to store alphanumeric characters.
27. **Calendar** data types are used to store calendar information like year, month, day, hour, minute, second and fraction of a second.
28. **Timestamp** has been designed for recording all information at once.
29. Digitized images and sounds use **Binary** type format.
30. A **Boolean** number uses one bit to store YES/NO type data.
31. The field that has unique importance in the table is known as **Key** field.
32. A field or combination of fields capable of identifying each record uniquely is known as **Primary** key.
33. **Primary** key values cannot contain Duplicate or Null values.
34. A **null value** means unknown or missing value.
35. A table cannot have more than one **primary** key.
36. The **logical name** of attribute is used at the time of designing the data model.
37. **Composite primary** key is a combination of more than one field serving as Primary key.
38. **Field type** allows us to assign a data type to each field.
39. The **description** helps the user to understand what the purpose of each field is.
40. **Field properties** are used to control and validate the data that is to be entered.