Design of a database is called the schema.

Types of Schema

1. Physical schema
2. Logical schema
3. View schema.

1. Physical schema

- The design of a database at physical level is called physical schema, how the data stored in blocks of storage is described at this level.
- This is the lowest level of data abstraction.
- It describes how data is actually stored in database.
- You can get the complex data structure details at this level.

2. Logical schema

- Design of database at logical level is called logical schema.
- Programmers and database administrators work at this level, at this level data can be described as certain types of data records gets stored in data structures, however the internal details such as implementation of data structure is hidden at this level which is available at physical level.
- This is the middle level of 3-level data abstraction architecture. It describes what data is stored in database.

3. View schema

Design of database at view level is called view schema.

This generally describes end user interaction with database systems.

Highest level of data abstraction. This level describes the user interaction with database system.

Example:

Let’s say we are storing customer information in a customer table.

At physical level these records can be described as blocks of storage (bytes, gigabytes, terabytes etc.) in memory. These details are often hidden from the programmers.

At the logical level these records can be described as fields and attributes along with their data types, their relationship among each other can be logically implemented. The programmers generally work at this level because they are aware of such things about database systems.

At view level, user just interact with system with the help of GUI and enter the details at the screen, they are not aware of how the data is stored and what data is stored; such details are hidden from them.