**\*\*Attribute in the Context of a Database: \*\***

In the context of a database, an attribute refers to a specific piece of information or characteristic that describes an entity or object. Attributes are represented by columns in a database table, and each attribute corresponds to a particular aspect or property of the entity being modeled.

\*\***Importance of a Unique Identifier: \*\***

Having a unique identifier for each item in a database is crucial for several reasons:

1. \*\*Data Integrity: \*\* A unique identifier ensures that each item in the database can be uniquely identified, preventing duplicate or inconsistent data.

2. \*\*Data Retrieval: \*\* Unique identifiers facilitate efficient retrieval of specific items from the database, enabling accurate data manipulation and analysis.

3. \*\*Referential Integrity: \*\* Unique identifiers serve as reference points for establishing relationships between different entities in the database, ensuring integrity and consistency in the data model.

**\*\*Examples of Attributes for a "Patient" Entity in a Hospital Database: \*\***

1. Patient ID

2. Name

3. Date of Birth

4. Gender

5. Medical History

**\*\*Characteristics to Distinguish Library Books: \*\***

1. ISBN (International Standard Book Number)

2. Title

3. Author

**\*\*Difference Between Single-Valued and Multi-Valued Attributes: \*\***

\*\*Single-Valued Attribute: \*\* A single-valued attribute is an attribute that holds only one value for each instance of an entity. For example, "Date of Birth" for a person entity is a single-valued attribute because each person has only one date of birth.

\*\*Multi-Valued Attribute: \*\* A multi-valued attribute is an attribute that can hold multiple values for each instance of an entity. For instance, the "Phone Number" attribute for a person entity might be multi-valued because a person can have multiple phone numbers.