DMDD Notes:

***Entities:*** It is a real-world object, that should be differentiable and distinguishable from other objects based on their values of attributes

For example: In Class 11 we have 2 student names John Billy and John Brutz

So, if we have both first name and last name present as attributes in the table than that will be a entity.

But if we only have first name present as a attribute then it will only be a object as the attributes are not able to distinguish between different records.

Types of Entities:

1. Tangible: Physically exists in life ex: Person, Products etc
2. Intangible: Logically exists ex: Virtual memory etc

ER diagram basic concepts:

1. Enterprise : Any kind of organization
2. Entity: Object or things in real world
3. Attributes: Characteristics of entities
4. Value: Data Stored in attributes
5. Entity Set: A table
6. Domain: Information stored in attributes

***Attributes:*** Characteristics which define an entity. Columns in the table

Types of Attributes:

1. Simple Attribute: Attributes which cannot be divided further are Simple

Ex: Age = 24, we cannot gain more information from this data

1. Composite Attribute: Attributes which can be divided further to gain more information about the entity

Ex: Customer Name: Parth Bipin Shah has Fist Name, Middle Name and Last Name

1. Single Value Attribute: Attributes which can possibly have single value attribute ex: Age = 24, in real world a person cannot have more than 1 age
2. Multiple Value Attribute: Attribute which can have more than 1 value.

Ex: Phone number, a person can have multiple phone numbers

1. Derived Attribute: Attribute that can be derived from a know attribute

Ex: we know DOB of a person we can derive age from this

1. Stored Attribute: Attribute that cannot be derived further

Ex: DOB cannot be derived further

Relationships in ER Diagram.