



Basic Tasks

2.

- a) Entity: Something of the real word.
- b) Entity type: Generalization of similar entity.
- c) Entity instance: Examples of entity type.
- d) Optional: a non-mandatory relationship or attribute.
- e) Mandatory: mandatory relationship or attribute.

f) Cardinality: The numerical characteristics of relationships between entities.

3.

A data model is an abstraction of data characteristics and serves as a framework for teaching database management. The structural framework used in database systems to provide means for information representation and manipulation.

The importance of data modelling:

(1) Data modeling can help consolidate disparate data into a clear structure, making it easier to understand and manage. By defining entities, attributes, and relationships, data modeling can provide a unified view and make the organization and connection of data clearer and more visible.

(2) Data modeling can help identify and solve data quality issues. By defining standards and restricting data, data modeling ensures the consistency, accuracy, and completeness of data. This helps identify errors, redundancies, and inconsistencies in the data and provides data cleansing rules and validation.

(3) Data modelling forms the basis for data analysis. By modeling data in a structured way, it is easier to extract valuable information and insights using analytical methods such as statistics and machine learning.

Medium tasks



