1. What is a data model?

Data models are visual representations of an enterprise’s data elements and the connections between them. By helping to define and structure data in the context of relevant business processes, models support the development of effective information systems. They enable business and technical resources to collaboratively decide how data will be stored, accessed, shared, updated and leveraged across an organization.

1. Name 2 types of Data Models and give some examples for each.

Conceptual Data Models: High-level, static business structures and concepts.

Logical Data Models: Entity types, data attributes and relationships between entities.

1. Consider the steps in the database design process
2. What are the goals of each step?

A good database design is, therefore, one that: **Divides your information into subject-based tables to reduce redundant data.** Provides Access with the information it requires to join the information in the tables together as needed. Helps support and ensure the accuracy and integrity of your information.

1. In which step is the ER Model used?

Database design involves 4 phases - Requirement collection & analysis phase, conceptual schema (or conceptual database), logical design phase & physical design phase. ER models are used in **conceptual Database design phase**. It includes detailed description of the entity types, relationship & constraints.

1. In which step is the Relational Data Model used?

Relational Model (RM) represents the database as a collection of relations. A relation is nothing but a table of values. Every row in the table represents a collection of related data values. These rows in the table denote a real-world entity or relationship.

\*End of the Tutorial\*\*