**TASK 1.1 STUDY OF ER MODEL**

**AIM:** studying about ER Model in detail

**Procedure: 1. Define Purpose and Scope**

* Clearly understand the goals and boundaries of the system or problem domain you are modeling. What do you need to capture and why?​

**2. Identify Entities**

* List all significant objects or concepts (entities) in the domain. Examples include "Student," "Course," "Employee," etc.
* Represent entities using rectangles in the ER diagram.​

**3. Identify Attributes**

* Determine the key properties for each entity, such as "Student Name," "Employee ID," etc.
* Draw these as ovals and connect them to their respective entities. Identify primary (unique) attributes.​

**4. Identify Relationships**

* Establish how entities are related to each other (e.g., a "Student" enrolls in a "Course").
* Draw relationships as lines; optionally, diamonds label relationships in Chen notation.​

**5. Define Cardinalities and Participation Constraints**

* Specify how many instances of one entity can relate to how many instances of another (e.g., one-to-many, many-to-many).
* Indicate whether participation is mandatory or optional.​

**6. Refine and Organize Diagram**

* Arrange entities and relationships logically to enhance readability.
* Group related items, remove redundancies, and ensure clarity for stakeholders.​

**7. Validate the Model**

* Check with stakeholders or domain experts to ensure all necessary data and relationships are represented.
* Review for missing entities, incorrect relationships, or ambiguous cardinality.​

**8. Finalize and Document**

* Make sure all elements are labeled and documented.
* Confirm the ER diagram can be mapped to relational tables for implementation.​

**Entity-Relationship Model-Notations**

**A chart with symbols and symbols

AI-generated content may be incorrect.**

**ER DIAGRAMS**

**EXAMPLES:**

**1.CUSTOMER DETAILS**

**A diagram of a customer

AI-generated content may be incorrect.**