

## Chapter 2

# ER DIAGRAM AND RELATIONAL SCHEMA DIAGRAM

## 2.1 Entity-Relationship Diagram

An entity relationship diagram, usually referred to as an E-R diagram represents the attributes, entities and relationships in a relational schema design.

### Entity

Entities are represented by means of rectangles. Rectangles are named with the entity set they represent. They represent the table names included in your execution of queries.



Fig - 2.1 Entity Representation

### Attributes

Attributes are the properties of entities. Attributes are represented by means of ellipses. Every ellipse represents one attribute and is directly connected to its entity (rectangle). There can be any number of attributes, there are different types of attributes too like the primary attribute and others.

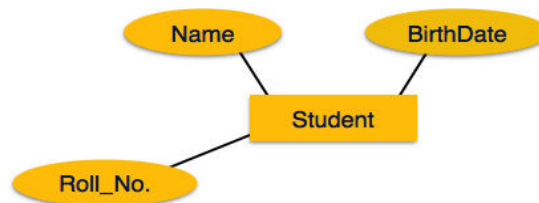


Fig - 2.2 Attribute Representation

### Relationship

Relationships are represented by diamond-shaped box. Name of the relationship is written inside the diamond-box. All the entities (rectangles) participating in a relationship, are connected to it by a line. Different types of relationships are (1:1), (1:N), (M:N).

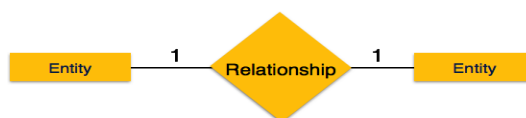


Fig - 2.3 Relationship Representation