

9 Lecture - CS403

Important Mcqs

1. **In the context of databases, what is a relationship?**

- A) The physical structure of a database
- B) The association between entities
- C) The SQL query used to retrieve data
- D) The primary key of a table

Answer: B) The association between entities

What are the different types of relationships in an Entity-Relationship Diagram (ERD)?

- A) One-to-one, many-to-one, and many-to-many
- B) One-to-many, many-to-many, and exclusive-or
- C) Binary, ternary, and quaternary
- D) Functional, multivalued, and join

Answer: B) One-to-many, many-to-many, and exclusive-or

What does the cardinality of a relationship in an ERD define?

- A) The number of entities involved in the relationship
- B) The types of attributes associated with the entities
- C) The physical location of the entities in the database
- D) The number of instances of an entity that can be associated with another entity

Answer: D) The number of instances of an entity that can be associated with another entity

What does the degree of a relationship in an ERD refer to?

- A) The number of entities involved in the relationship
- B) The types of attributes associated with the entities
- C) The physical location of the entities in the database
- D) The number of instances of an entity that can be associated with another entity

Answer: A) The number of entities involved in the relationship

Which of the following is an example of a one-to-many relationship in an ERD?

- A) A department can have many employees, but an employee can belong to only one department
- B) A customer can place many orders, and an order can have many line items
- C) A student can attend many classes, and a class can have many students
- D) A product can be sold at many stores, and a store can sell many products

Answer: A) A department can have many employees, but an employee can belong to only one department

Which of the following is an example of a many-to-many relationship in an ERD?

- A) A department can have many employees, but an employee can belong to only one department
- B) A customer can place many orders, and an order can have many line items
- C) A student can attend many classes, and a class can have many students
- D) A product can be sold at many stores, and a store can sell many products

Answer: C) A student can attend many classes, and a class can have many students

What is the purpose of a foreign key in a relationship?

- A) To link two tables in a database

- B) To ensure data consistency and referential integrity
- C) To represent the association between entities in an ERD
- D) To provide a unique identifier for each entity in a table

Answer: B) To ensure data consistency and referential integrity

What is the difference between a mandatory and optional relationship?

- A) Mandatory relationships require at least one instance of an entity to be associated with another entity, while optional relationships do not.
- B) Mandatory relationships involve two entities, while optional relationships involve three or more entities.
- C) Mandatory relationships are represented using a solid line in an ERD, while optional relationships are represented using a dashed line.
- D) Mandatory relationships are always one-to-many, while optional relationships can be one-to-one or many-to-many.

Answer: A) Mandatory relationships require at least one instance of an entity to be associated with another entity, while optional relationships do not.

What is the purpose of a junction table in a many-to-many relationship?

- A) To store the attributes associated with each