

8 Lecture - CS403

Important Subjective

1. **Define the term "attribute" in the context of a database.**

Answer: In the context of a database, an attribute is a characteristic or property of an entity or a relationship.

Explain the difference between a simple and a composite attribute.

Answer: A simple attribute contains only one value, while a composite attribute is composed of multiple values.

What is a derived attribute?

Answer: A derived attribute is an attribute that can be calculated or derived from other attributes.

What is a multivalued attribute?

Answer: A multivalued attribute is an attribute that can have multiple values for a single instance of an entity.

How is a null value represented in an attribute?

Answer: A null value in an attribute represents a missing or unknown value.

What is an atomic attribute?

Answer: An atomic attribute is an attribute that cannot be divided into smaller parts.

Explain the difference between a key attribute and a non-key attribute.

Answer: A key attribute is used to uniquely identify an instance of an entity, while a non-key attribute does not have this property.

What is a domain in the context of attributes?

Answer: A domain is the set of possible values that an attribute can take.

Give an example of a domain for an attribute.

Answer: For example, the domain of an attribute "age" can be any positive integer value between 0 and 120.

What is an attribute domain constraint?

Answer: An attribute domain constraint is a rule that specifies the allowed values for an attribute based on its domain.