

20 Lecture - CS403

Important Subjective

1. **What is Second Normal Form (2NF)?**

Answer: Second Normal Form (2NF) is a database normalization concept that ensures that all non-key attributes are dependent on the entire primary key, and not just a part of it.

What is the purpose of achieving Second Normal Form?

Answer: The purpose of achieving Second Normal Form is to eliminate partial dependencies and ensure data integrity.

How do you identify partial dependencies in a table?

Answer: Partial dependencies can be identified by looking for non-key attributes that depend on only a part of the primary key.

Can a table in Second Normal Form have composite primary keys?

Answer: Yes, a table in Second Normal Form can have composite primary keys.

What is the difference between First Normal Form (1NF) and Second Normal Form (2NF)?

Answer: First Normal Form eliminates repeating groups of data, while Second Normal Form eliminates partial dependencies.

How can you achieve Second Normal Form?

Answer: To achieve Second Normal Form, the table must be in First Normal Form and then all partial dependencies must be removed.

What is an example of a table that violates Second Normal Form?

Answer: A table that has a non-key attribute that depends on only a part of the primary key violates Second Normal Form.

What are some benefits of having a database in Second Normal Form?

Answer: Some benefits of having a database in Second Normal Form include improved data integrity, reduced data redundancy, and easier data maintenance.

Can a table be in Second Normal Form without being in First Normal Form?

Answer: No, a table must be in First Normal Form before it can be in Second Normal Form.

Can a table in Second Normal Form have non-key attributes that are not dependent on the primary key?

Answer: No, all non-key attributes in a table in Second Normal Form must be dependent on the entire primary key.