

# 20 Lecture - CS403

## Important Mcqs

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

- a. It is a database modeling technique to eliminate data redundancy
- b. It is a normalization concept that ensures all non-key attributes are dependent on the entire primary key
- c. It is a type of database join
- d. It is a database indexing technique

**Answer: b. It is a normalization concept that ensures all non-key attributes are dependent on the entire primary key.**

### Which of the following is a violation of Second Normal Form?

- a. A table has a composite primary key
- b. A table has a non-key attribute that depends on only part of the primary key
- c. A table has repeating groups of data
- d. A table has a single primary key attribute

**Answer: b. A table has a non-key attribute that depends on only part of the primary key.**

### What is the first step in achieving Second Normal Form?

- a. Eliminating data redundancy
- b. Defining a primary key for the table
- c. Removing null values from the table
- d. Applying functional dependencies to the table

**Answer: b. Defining a primary key for the table.**

### Which normal form is 2NF based on?

- a. First Normal Form (1NF)
- b. Third Normal Form (3NF)
- c. Fourth Normal Form (4NF)
- d. Fifth Normal Form (5NF)

**Answer: a. First Normal Form (1NF).**

### Which of the following is a benefit of Second Normal Form?

- a. Improved query performance
- b. Reduced data storage space
- c. Improved data integrity
- d. Increased data redundancy

**Answer: c. Improved data integrity.**

### Which type of dependency does Second Normal Form eliminate?

- a. Full dependency
- b. Partial dependency
- c. Transitive dependency
- d. Multivalued dependency

**Answer: b. Partial dependency.**

### Which of the following is an example of a violation of Second Normal Form?

- a. A table with a single primary key attribute

- b. A table with a composite primary key
- c. A table with a non-key attribute that depends on another non-key attribute
- d. A table with a non-key attribute that depends on the entire primary key

**Answer: c. A table with a non-key attribute that depends on another non-key attribute.**

**What is the purpose of normalizing a database to Second Normal Form?**

- a. To eliminate null values from the table
- b. To eliminate data redundancy
- c. To improve query performance
- d. To increase data redundancy

**Answer: b. To eliminate data redundancy.**

**Which of the following is a characteristic of a table in Second Normal Form?**

- a. Each non-key attribute is dependent on the entire primary key
- b. Each non-key attribute is dependent on a part of the primary key
- c. The table has repeating groups of data
- d. The table has no primary key

**Answer: a. Each non-key attribute is dependent on the entire primary key.**

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

- a. 1NF eliminates partial dependencies, while 2NF eliminates repeating groups
- b. 1NF eliminates repeating groups, while 2NF eliminates partial dependencies
- c. 1NF eliminates transitive dependencies, while 2NF eliminates partial dependencies
- d. 1NF eliminates null values, while 2NF eliminates partial dependencies

**Answer: b. 1NF eliminates repeating groups, while 2NF eliminates partial dependencies.**