



ممم جداً

هذا الملف للمراجعة السريعة واخذ الملاحظات عليه فقط ،لانه يحتوي على اقل من 20٪ مما يتم شرحه في الفيديوهات الاستعجال والاعتماد عليه فقط سوف يجعلك تخسر كميه معلومات وخبرات كثيره

يجب عليك مشاهدة فيديو الدرس كاملا

لاتنسى عمل لايك ومشاركة القناة لتعم الفائدة للجميع لا تنسونا من دعائكم

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First Normal Form
1 NF





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1st Normal Form (1NF)

- 1. A primary key: A unique identifier for each record in the table.
- 2. Atomic values: Each column should contain only a single value, and each value should be indivisible.
 - Note: Here, <u>atomicity</u> states that a single cell cannot hold multiple values. It must hold only a single-valued attribute.
 - The First normal form disallows the multi-valued attribute, composite attribute, and their combinations.
- 3. No repeating groups: Each column should have a distinct name, and there should be no repeating groups of columns.





Customer Table:

Customer ID	Name	Address	Order ID
1	John	123 Main Street	1, 2, 3
2	Mary	456 Elm Street	4, 5, 6

Order Table:

Order ID	Customer ID	Product	Quantity
1	1	Item 1	3
2	1	Item 2	1
3	1	Item 3	2
4	2	Item 4	4
5	2	Item 5	1
6	2	Item 2	2

In the above example, the customer table was not in 1NF because the order ID column contained multiple values for each record. By creating a separate table for orders and linking it to the customer table with a foreign key, we have normalized the database to 1NF.

By applying the First Normal Form, you achieve atomicity, and also every column has unique values.



