Unit 3: Database Management System using LibreOffice Base
Chapter 10: Working with Multiple Tables

1. Editing and Deleting Tables

1.1 Editing Table Design

a. Adding Columns/Fields

Steps:

1. Open **LibreOffice Base**.
2. In the left pane, click on **Tables**.
3. Right-click the table name > Click **Edit**.
4. In design view, add a new field in the next blank row.
5. Enter **Field Name** and **Field Type**.
6. Save the table (**Ctrl + S**).

b. Deleting Columns/Fields

Steps:

1. Open the table in **design view**.
2. Right-click the field row to be deleted.
3. Click **Delete Rows**.
4. Save the changes.

c. Modifying Columns/Fields

- You can **change the field type** or **description** directly in design view.
- Make sure **data compatibility** is maintained when changing types.

d. Renaming a Table

Steps:

1. Right-click the table in the **Tables pane**.
2. Click **Rename**.
3. Enter the new name and press **Enter**.

e. Deleting a Table

Steps:

1. Right-click the table in the **Tables pane**.
2. Click **Delete**.
3. Confirm the deletion.

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2. Relationships

2.1 Types of Relationships

Type	Description
One to One	A record in Table A relates to **only one** record in Table B.
One to Many	A record in Table A can relate to **many** records in Table B. *(Most common)*
Many to Many	Records in Table A can relate to **many** records in Table B and vice versa.

Many-to-Many relationships require a third (junction) table to manage.

2.2 Advantages of Relating Tables in a Database

- **Reduces redundancy** (duplicate data).
- **Improves data integrity**.
- **Simplifies queries**.
- **Allows modular design** (organizing data into logical units).

2.3 Referential Integrity

- Ensures that **foreign key values** in a table match **primary key values** in the related table.
- Prevents **orphan records**.
- Maintains consistency during **updates or deletions**.

Example: If a student is deleted from the Student table, Referential Integrity ensures that related fee or attendance records aren't left without a valid student reference.

2.4 Creating and Editing Relationships Between Tables

Steps to Create a Relationship:

1. Go to **Tools > Relationships**.
2. Click **Add Tables**, select required tables > Click **Add**.
3. Drag the **primary key** of one table to the **foreign key** of the related table.
4. A dialog box opens — choose:
    - **Type of relationship** (One-to-One or One-to-Many).
    - Check **Referential Integrity**.
5. Click **Create**.

Steps to Edit a Relationship:

1. In the **Relationships window**, double-click on the connecting line between tables.
2. Modify settings such as:
    - Enforce referential integrity
    - Cascade update/delete
3. Click **OK**.