Macro Programming

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Grouping, Sorting, and Calculated Fields

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Grouping Data in PivotTables

Purpose:

- Organize large datasets into meaningful summaries

- Aggregate dates, numeric ranges, or text categories

- Simplify analysis and reporting

Grouping Techniques:

1. **Group by Date:** Months, Quarters, Years

2. **Group Numeric Data into Ranges:** e.g., 0–100, 101–500

3. **Group Text Data:** By first letter or categories

How to Group Data

Create a PivotTable: Insert a PivotTable from your dataset

Access Field List: Ensure the Field List is visible

Drag Fields: Drag desired field (date, numeric, text) into Rows or Columns

Right-Click to Group:

- Right-click the field in the PivotTable → Select **Group**

- Apply desired grouping technique

Example:

- Group `Date` field by Month → Shows monthly sales totals

- Group `Sales Amount` into ranges → Shows how many transactions fall into 0–100, 101–500, etc.

Sorting Data in PivotTables

Purpose: Arrange data to quickly identify top/bottom performers or trends

Sorting Methods:

1. **Ascending / Descending Order:**

    ○   Click drop-down arrow in column header

    ○   Choose **Sort A to Z** or **Sort Z to A**

2. **Custom Sorting Options:**

    ○   Go to **Data tab** → **Sort** → **Custom Order**

    ○   Sort based on criteria such as specific categories or numerical ranges.

Sorting Data in PivotTables

Example:

- Sort genres by total sales descending to see top-selling genres

Calculated Fields

Definition:

- Custom fields created in a PivotTable

- Perform calculations on other fields

- Allow new insights without altering original data

Example Use Case:

- Calculate a 10% commission on sales per genre

- Formula: `=Sales * 0.1`

Creating a Calculated Field

Steps:

1. Click anywhere in the PivotTable → Activate PivotTable Tools

2. Go to **Analyze → Fields, Items & Sets → Calculated Field**

3. Define Field:

    ○ Name: Commission

    ○ Formula: =Sales * 0.1

4. Click **OK** → Field appears in PivotTable

PivotTable

Example Output

Genre	Sales	Commission
Fiction	1200	120
Mystery	200	20

Modifying Calculated Fields

Steps:

1. Click PivotTable → Analyze → Fields, Items & Sets → Calculated Field

2. Select field to edit

3. Update formula or name → Click **OK**

Example:

- Change `Commission` from 10% → 12%

- Formula: `=Sales * 0.12` → PivotTable updates automatically

Deleting Calculated Fields

Steps:

1. Click PivotTable → Analyze → Fields, Items & Sets → Calculated Field

2. Select field to delete

3. Click **Delete** → **Confirm**

Purpose: Remove unnecessary or obsolete calculated data.

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Summary

- **Grouping:** Aggregate dates, numbers, or text for easier analysis

- **Sorting:** Arrange data ascending, descending, or custom order

- **Calculated Fields:** Create new fields using formulas on existing data

- **Outcome:** Makes PivotTables **dynamic, interactive, and insightful**

THANK YOU

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