

# **Introduction to Computer Applications**

**CISY 1225  
Chapter 8**

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**Last updated: May 2014**

**Good Morning**

## Chapter 8

- Chapter 8
  - Introduction of Datasets and tables
  - Selected topics
  - Only exercises

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## CISY 1225 Custom book

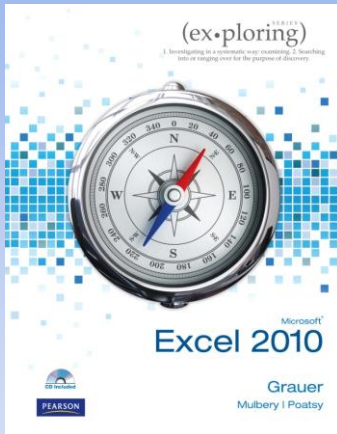
### Chapter 8 Excel Datasets and Tables

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# Exploring Microsoft Office Excel 2010

by Robert Grauer, Keith Mulbery,  
and Mary Anne Poatsy



## Chapter 4 Excel Datasets and Tables

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## Objectives

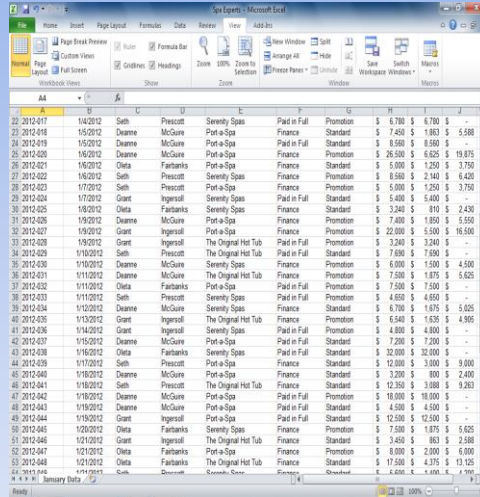
- Freeze rows and columns
- Print large datasets
- Understand table design
- Create a table
- Apply a table style
- Sort data
- Filter data
- Insert a total row

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# Large Datasets

- A large dataset can be difficult to read
  - Row and column headings may scroll off the screen



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# Freezing Rows and Columns

- **Freezing** keeps rows and columns visible during scrolling

Option	Description
Freeze Panes	Keeps both rows and columns above and to the left of the active cell visible.
Freeze Top Row	Keeps only the top row visible.
Freeze First Column	Keeps only the first column visible.

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# Freezing Rows and Columns

- The effect of freezing rows 1 – 5 and columns A – B

The Spa Experts							
Monthly Transactions							
Down Payment Requirement:							
Transaction Number	Date	Manufacturer	Payment Type	Transaction	Amount	Down Payment	Owed
15	2012-010	1/4/2012	Port-a-Spa	Finance	Standard	\$ 10,000	\$ 2,500 \$ 7,500
16	2012-011	1/4/2012	Port-a-Spa	Finance	Standard	\$ 10,000	\$ 2,500 \$ 7,500
17	2012-012	1/4/2012	Port-a-Spa	Finance	Standard	\$ 4,550	\$ 4,550 \$ -
18	2012-013	1/4/2012	Serenity Spas	Paid in Full	Promotion	\$ 8,490	\$ 8,490 \$ -
19	2012-014	1/4/2012	The Original Hot Tub	Paid in Full	Standard	\$ 5,432	\$ 5,432 \$ -
20	2012-015	1/4/2012	Serenity Spas	Paid in Full	Promotion	\$ 7,450	\$ 7,450 \$ -
21	2012-016	1/4/2012	The Original Hot Tub	Paid in Full	Standard	\$ 5,432	\$ 5,432 \$ -
22	2012-017	1/4/2012	Serenity Spas	Paid in Full	Promotion	\$ 6,780	\$ 6,780 \$ -
23	2012-018	1/5/2012	Port-a-Spa	Finance	Standard	\$ 7,450	\$ 1,863 \$ 5,588
24	2012-019	1/5/2012	Port-a-Spa	Paid in Full	Standard	\$ 6,550	\$ 8,560 \$ -
25	2012-020	1/6/2012	Port-a-Spa	Finance	Promotion	\$ 26,500	\$ 6,625 \$ 19,875
26	2012-021	1/6/2012	Port-a-Spa	Finance	Standard	\$ 5,000	\$ 1,250 \$ 3,750
27	2012-022	1/6/2012	Serenity Spas	Finance	Promotion	\$ 6,560	\$ 2,140 \$ 4,420
28	2012-023	1/7/2012	Port-a-Spa	Finance	Promotion	\$ 5,000	\$ 1,250 \$ 3,750
29	2012-024	1/7/2012	Serenity Spas	Paid in Full	Standard	\$ 5,400	\$ 5,400 \$ -
30	2012-025	1/8/2012	Serenity Spas	Finance	Standard	\$ 3,240	\$ 810 \$ 2,430
31	2012-026	1/9/2012	Port-a-Spa	Finance	Promotion	\$ 7,400	\$ 1,850 \$ 5,550
32	2012-027	1/9/2012	Port-a-Spa	Finance	Promotion	\$ 22,000	\$ 5,500 \$ 16,500
33	2012-028	1/9/2012	The Original Hot Tub	Paid in Full	Promotion	\$ 3,240	\$ 3,240 \$ -
34	2012-029	1/10/2012	The Original Hot Tub	Paid in Full	Standard	\$ 7,690	\$ 7,690 \$ -
35	2012-030	1/10/2012	Serenity Spas	Finance	Promotion	\$ 6,000	\$ 1,500 \$ 4,500
36	2012-031	1/11/2012	The Original Hot Tub	Finance	Promotion	\$ 7,500	\$ 1,875 \$ 5,625
37	2012-032	1/11/2012	Port-a-Spa	Paid in Full	Promotion	\$ 7,500	\$ 7,500 \$ -
38	2012-033	1/11/2012	Serenity Spas	Paid in Full	Promotion	\$ 4,650	\$ 4,650 \$ -

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# Printing Large Datasets

- The **Page Layout** tab offers options to help print large datasets:
  - Page Breaks
  - Print Area
  - Page Titles

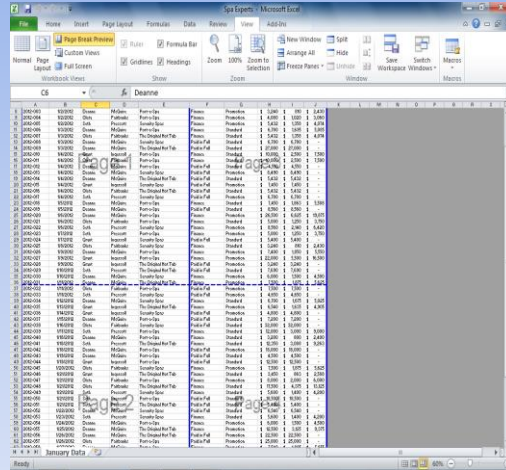


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# Manual Page Breaks

- A page break indicates where data will start on a new printed page

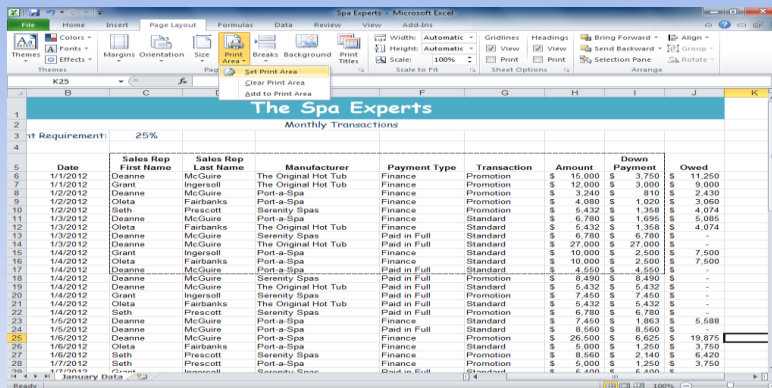


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# Setting a Print Area

- A print area defines the range of data to print

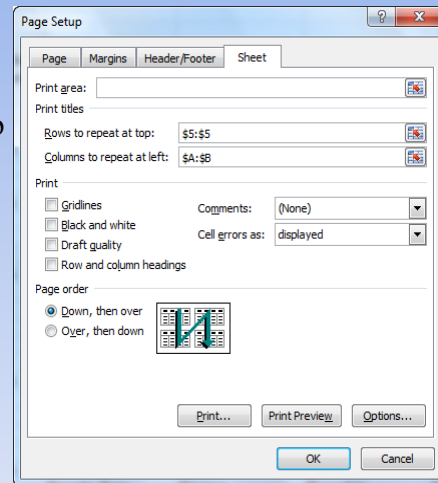


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## Print Titles

- **Print titles** indicate some rows or columns that will repeat at the top or side of each printed page



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## Excel Tables

- A **table** is a structured range of related data formatted to enable data management and analysis
- Excel tables offer many features not available to regular ranges

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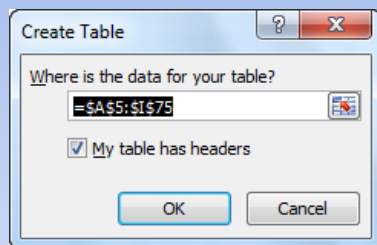
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## Table Design

- A **field** is an individual piece of data
  - Field names appear in the top row as column headings
  - Field names should be short, but descriptive
- A **record** is a complete set of data for an entity
  - Each record is listed in a row of the table
  - Do not insert blank rows in the table

## Creating a Table

- A table can easily be created from existing data





## Creating a Table

- The **Design** tab on the **Table Tools** contextual tab opens when the table is selected

Transaction Number	Date	Sales Rep	First Name	Last Name	Manufacturer	Payment Type	Transaction Type
2012-001	1/1/2012	Deanne	McClure	The Original Hot Tub	Finance	Promotion	S
2012-002	1/1/2012	Glenn	Ingersoll	The Original Hot Tub	Finance	Promotion	S
2012-003	1/2/2012	Glenn	McClure	Port-a-Spa	Finance	Promotion	S
2012-004	1/2/2012	Clara	Fairbanks	Port-a-Spa	Finance	Promotion	S
2012-005	1/2/2012	Seth	Phares	Stately Spas	Finance	Promotion	S
2012-006	1/3/2012	Deanne	McClure	Port-a-Spa	Finance	Standard	S
2012-007	1/3/2012	Clara	Fairbanks	The Original Hot Tub	Finance	Standard	S
2012-008	1/3/2012	Deanne	McClure	Stately Spas	Paid in Full	Standard	S
2012-009	1/3/2012	Deanne	McClure	The Original Hot Tub	Paid in Full	Standard	S
2012-010	1/4/2012	Glenn	Ingersoll	Port-a-Spa	Finance	Standard	S
2012-011	1/4/2012	Clara	Fairbanks	Port-a-Spa	Finance	Standard	S
2012-012	1/4/2012	Deanne	McClure	Port-a-Spa	Paid in Full	Standard	S
2012-013	1/4/2012	Deanne	McClure	Stately Spas	Paid in Full	Promotion	S
2012-014	1/4/2012	Deanne	McClure	The Original Hot Tub	Paid in Full	Standard	S
2012-015	1/4/2012	Glenn	Ingersoll	Stately Spas	Paid in Full	Promotion	S
2012-016	1/4/2012	Clara	Fairbanks	The Original Hot Tub	Paid in Full	Standard	S
2012-017	1/4/2012	Seth	Phares	Stately Spas	Paid in Full	Promotion	S
2012-018	1/5/2012	Deanne	McClure	Port-a-Spa	Paid in Full	Standard	S
2012-019	1/5/2012	Deanne	McClure	Port-a-Spa	Finance	Promotion	S
2012-020	1/5/2012	Deanne	McClure	Port-a-Spa	Finance	Promotion	S
2012-021	1/5/2012	Deanne	McClure	Port-a-Spa	Finance	Promotion	S
2012-022	1/5/2012	Seth	Phares	Stately Spas	Finance	Promotion	S
2012-023	1/7/2012	Seth	Phares	Port-a-Spa	Finance	Promotion	S
2012-024	1/7/2012	Glenn	Ingersoll	Stately Spas	Paid in Full	Standard	S
2012-025	1/8/2012	Clara	Fairbanks	Stately Spas	Finance	Standard	S
2012-027	1/9/2012	Glenn	Ingersoll	Port-a-Spa	Finance	Promotion	S
2012-028	1/9/2012	Glenn	Ingersoll	The Original Hot Tub	Paid in Full	Standard	S
2012-029	1/10/2012	Seth	Phares	The Original Hot Tub	Paid in Full	Standard	S
2012-030	1/10/2012	Deanne	McClure	Stately Spas	Finance	Promotion	S

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## Adding Records

- Add a new record at the bottom of the table by clicking in the row under the table
- Add a new record within the table by clicking in the record below the insertion point
  - Click the **Home** tab
  - Click the **Insert** arrow in the **Cells** group
  - Select **Insert Table Rows Above**

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## Editing and Deleting Records

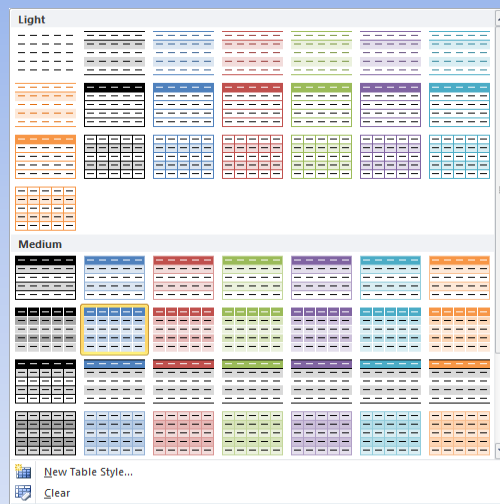
- Data within a table record can be edited using the same techniques as those for a regular cell
- Deleting a record removes it from the table
  - Click the **Home** tab
  - Click the **Delete** arrow in the **Cells** group
  - Select **Delete Table Rows**

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## Applying a Table Style

- A **table style** controls the fill color of the header row, columns, and records



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## Table Style Options

- The **Table Styles Options** group on the **Design** tab contains check boxes to further format the table

Check Box	Action
Header Row	Displays the header row at the top of the table.
Total Row	Displays a total row at the bottom of the table.
First Column	Applies a different format to the first column.
Last Column	Applies a different format to the last column.
Banded Rows	Displays alternate fill colors for even and odd rows.
Banded Columns	Displays alternate fill colors for even and odd columns.

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## Sorting Data

- **Sorting** arranges records in a table
  - Sort on one column
  - Sort on multiple columns
- Records can be sorted in ascending or descending order

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## Sorting by One Column

- Excel offers several ways to sort a single column

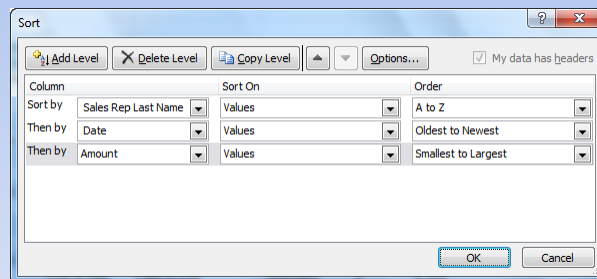
Data type	Options	Explanation
Text	Sort A to Z	Arranges data in alphabetical order.
	Sort Z to A	Arranges data in reverse alphabetical order.
Dates	Sort Oldest to Newest	Displays data in chronological order.
	Sort Newest to Oldest	Displays data in reverse chronological order.
Values	Sort Smallest to Largest	Arranges values in sequential order.
	Sort Largest to Smallest	Arranges values in descending order.

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## Sorting by Multiple Columns

- Multiple level sorts** permits differentiation among records with duplicate data in the first sort

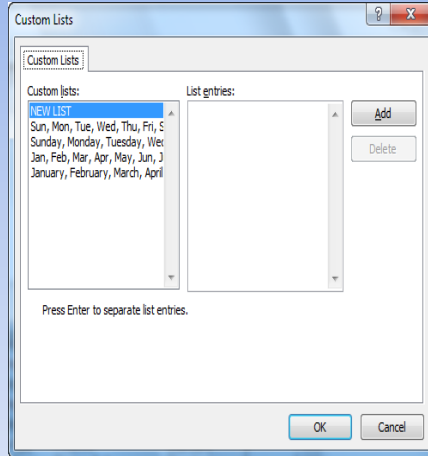


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## Creating a Custom Sort

- A custom sort can be created to arrange values in a customized fashion

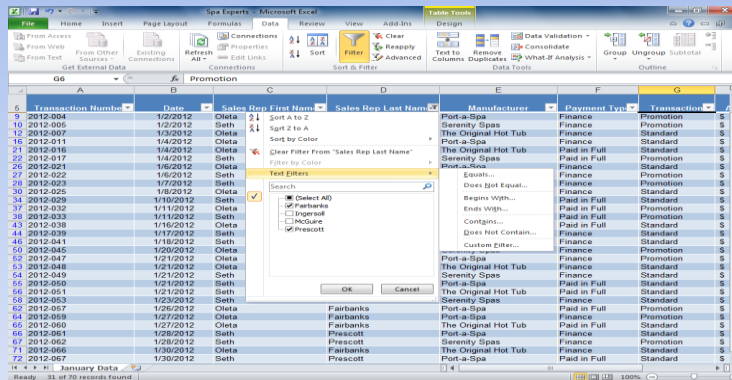


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## Filtering Data

- Filtering** is the process of displaying only records that meet specific conditions

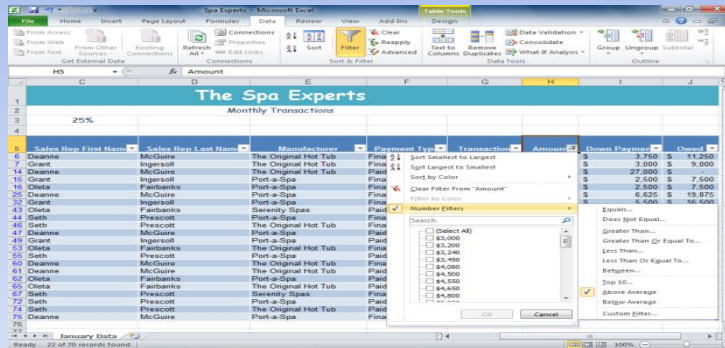


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## Filtering Numeric Data

- Numeric filters can be applied to display a range of values

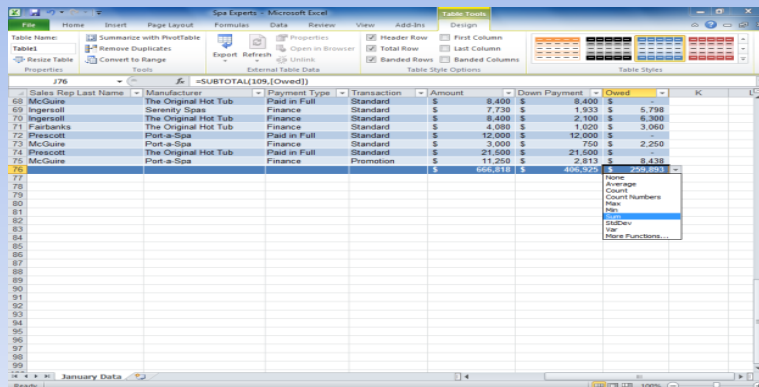


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## Creating a Total Row

- A total row appears as the last row of a table and offers statistical functions



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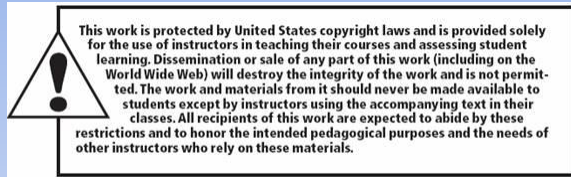
## Summary

- In this chapter, you have learned to manage large datasets by freezing rows and columns and controlling print options.
- You understand table design and can create and format a table.
- You can sort and filter data in a table.

## Questions



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