CAPSTONE EXERCISE

You just got an internship at Mountain View Realty, a real estate firm that focuses on the North Utah County area. The previous intern developed a spreadsheet listing houses listed and sold during the past several months. She included addresses, location, list price, selling price, listing date, and date sold. You need to convert the data to a table and manipulate the table. You will manage the large worksheet, prepare the worksheet for printing, sort and filter the table, include calculations, and format the table.

Prepare the Large Worksheet as a Table

You need to freeze the panes so that labels remain onscreen. You also want to convert the data to a table so that you can apply table options.

a. Open the *e04c1houses* workbook and save it as **e04c1houses_LastnameFirstname.**

b. Freeze the first row on the Sales Data worksheet.

c. Convert the data to a table, and then apply the **Table Style Medium 17.**

d. Remove duplicate records.

Add Calculated Fields and a Total Row

The office manager asked you to insert a column to display the percent of list price. The formula finds the sale price percentage of the list price. For example, if a house was listed at $100,000 and sells for $75,000, the percentage of list price is 75%. In some cases, the percentage is more than 100%. This happens when a bidding war occurs, and buyers increase their offers, which results in the seller getting more than the list price.

a. Insert a new field to the right of the Selling Price field. Name the new field **Percent of List Price.**

b. Create a formula with structured references to calculate the percent of the list price.

c. Format the column with **Percent Style** with one decimal place.

d. Insert a new field to the right of the Sale Date field. Name the new field **Days on Market.**

e. Create a formula with structured references to calculate the number of days on the market. If the result displays in a date format, apply the **General number format** to the average.

f. Add a total row to display the average percent of list price and average number of days on market. Format the average number of days on market as a whole number. Use an appropriate label for the total row.

Sort and Print the Table

To help the office manager compare house sales by city, you will sort the data. Then, you will prepare the large table to print.

a. Sort the table by city in alphabetical order, and add a second level to sort by days on market with the houses on the market the longest at the top within each city.

b. Adjust column widths so that the data is one page across (three pages total), and then wrap the column headings as needed.

c. Repeat the column headings on all pages.

d. Display the table in Page Break Preview.

e. Change page breaks so that city data does not span between pages, and then change back to Normal view.

f. Add a footer with your name on the left side, the sheet name code in the center, and the file name code on the right side.

Copy and Filter the Data

The office manager needs to focus on houses that took longer than 30 days to sell within 3 cities. To keep the original data intact for the agents, you will copy the table data to a new sheet and use that sheet to display the filtered data.

a. Copy the Sales Data worksheet, and then place the duplicate worksheet to the right of the original worksheet tab. Convert the table to a range of data, and delete the average row.

b. Rename the duplicate worksheet **Filtered Data.**

c. Display the filter arrows for the data.

d. Filter the data to display the cities of *Alpine, Cedar Hills,* and *Eagle Mountain.*

e. Filter the data to display records for houses that were on the market 30 days or more.

Apply Conditional Formatting

To highlight housing sales to illustrate trends, you will apply conditional formatting. Since data are sorted by city, you will use an icon set to color-code the number of days on market. You will also apply a data bar conditional formatting to the sale prices to help the office manager visualize the difference among the sales.

a. Apply the **3 Arrows (Colored) icon set** to the days on market values.

b. Apply the **Light Blue Data Bar conditional formatting** in the *Gradient Fill* section to the selling prices.

c. Create a new conditional format that applies **Yellow fill** and **bold font** to values that contain 95% or higher for the Percent of List Price column.

d. Edit the conditional format you created so that it formats values 98% or higher.