



Excel 2021 In Practice - Ch 4 Independent Project 4-4

COURSE NAME Fall 20231 CGS 1060 MASTER | CMays CGS1060C COMP LITERACY ENHANCED 701376

Start Date:08/23/2212:00 AMUS/Eastern Due Date:11/06/2211:59 PMUS/Eastern End Date:12/08/2211:59 PMUS/Eastern

Independent Project 4-4

Eller Systems has received contract data in a text file. You transform and import, sort, and filter the data. You also create a *PivotTable*, prepare a worksheet with subtotals, and format related data as an Excel table.

[Student Learning Outcomes 4.1, 4.3, 4.5, 4.6, 4.8]

File Needed: **Eller-04.xlsx** (Available from the Start File link.) and **EllerText-04.txt** (Available from the Resources link.)

Completed Project File Name: **[your name]-Eller-04.xlsx**

Skills Covered in This Project

- Format data in an Excel table.
- Sort data in an Excel table.
- Import a text file.
- Transform data in *Power Query*.
- Sort data by multiple columns.
- Add a calculated field in a table.
- Create a *PivotTable*.
- Format fields in a *PivotTable*.
- Use the *Subtotal* command.

- ☐ Open the **Eller-04** start file. If the workbook opens in *Protected View*, click the **Enable Editing** button so you can modify it. The file will be renamed automatically to include your name. Change the project file name if directed to do so by your instructor, and save it.
- ☐ Click the **Billable Hours** sheet tab and select cell **A4**.
- ☐ Click the **Format as Table** button [*Home* tab, *Styles* group], use **Light Gray, Table Style Medium 11**.
- ☐ Select cell **C6** and type the formula **=C5+1** to add one to the date in the previous cell.
- ☐ *AutoFill* the formula to copy it to row **51**.
- ☐ Type **.5 Add On** in cell **E4** and press **Enter**.
- ☐ Build a formula in cell **E5** to add **.5** to cell **D5** and press **Enter** to copy the formula. Format results to display two decimal places and apply **All Borders**.
- Copy dates as values.
 - ☐ Select cell **C5**. Cell C5 is a reference to the *TODAY* function in cell F2.
 - ☐ Sort the column by date in newest to oldest order. Because the dates are calculated, the formulas are wrong. The date that was originally in cell C5 sorted to row 51 and now has a relative reference to cell F48. (**Figure 4-113**).
 - ☐ Click the **Undo** button [*Undo* group, *Home* tab] and select cell **C5**. The formulas are restored.
 - ☐ Select cells **C5:C51**. You can copy and paste to replace the formulas with the actual dates.
 - ☐ Press **Ctrl+C** to copy the range to the *Clipboard*.
 - ☐ Select cell **C5** and click the **arrow** with the *Paste* button [*Home* tab, *Clipboard* group].
 - ☐ Choose **Values** (**Figure 4-114**).
 - ☐ Press **Esc** to remove the moving border and click cell **C5**. Formulas are replaced with the date. Your dates will be different from figures in this text.



10. Use *Power Query* to transform data.

- a. ☐ Select the **Contracts** sheet tab and select cell **A4**.
- b. ☐ Use the *From Text/CSV* command to preview the *EllerText-04.txt* file downloaded from the *Resources* link in the *Import Data* window.
- c. ☐ Click **Transform Data** in the preview window to open *Power Query*.
- d. ☐ Click the **Address** column label, press **Ctrl**, and click the **Phone Number** label.
- e. ☐ Click the **Remove Columns** button [*Home* tab, *Manage Columns* group].
- f. ☐ Select and remove these columns: **Zip**, **ID**, and **First Contact** (**Figure 4-115**).

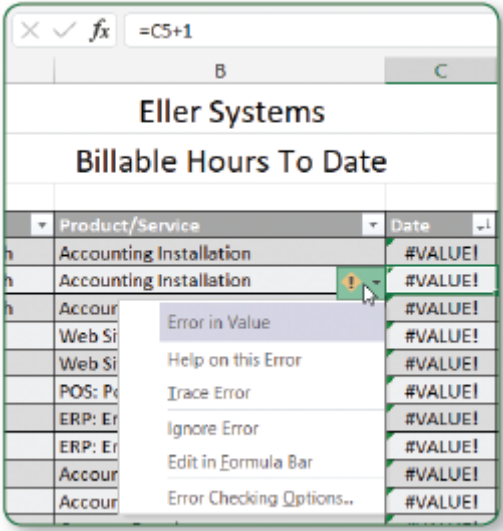


Figure 4-113 Errors result when calculated dates are sorted

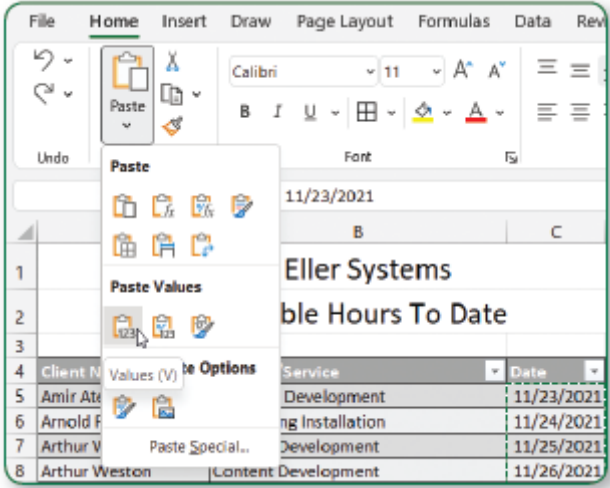


Figure 4-114 Dates are copied and pasted as values

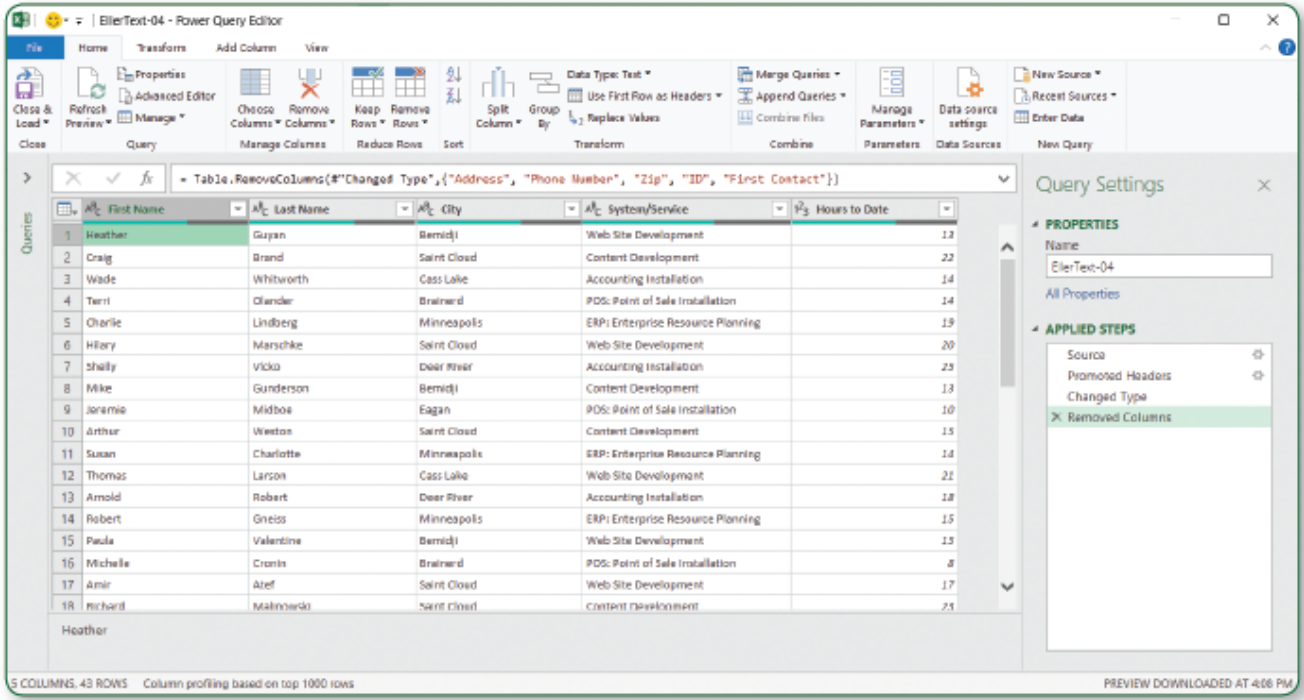


Figure 4-115 Columns removed in *Power Query*

- g. ☐ Scroll the window as needed to see rows **28:43**. There are 16 blank rows incorporated in the data. The *null* text string in the *Hours to Date* column is a clue.
 - h. ☐ Click the **arrow** with the *Remove Rows* button [*Home* tab, *Reduce Rows* group] and choose **Remove Bottom Rows**.
 - i. ☐ Type **16** in the *Number of rows* box and click **OK**. There are now 27 rows.
 - j. ☐ Click the **arrow** with the *Close & Load* button [*Home* tab, *Close* group] and load the data to cell **A4** in the existing worksheet.
11. Add a calculated field in a table.
- a. ☐ Select cell **F4**, type **Fees** as the header, and press **Enter**.
 - b. ☐ Select cell **F5** and build a formula to multiply the value in cell **E5** by **225**.
 - c. ☐ Format the values in column **F** as **Currency** with zero decimal places.
 - d. ☐ Close the *Queries & Connections* pane.
12. ☐ Sort the data by **Fees** and then by **City**, both in ascending order.
13. ☐ Change the font size for cells **A1:A2** to **20 pt.** and set the font style to **bold**.
14. ☐ Select cells **A1:F2** and center them across the selection.
15. ☐ Copy the **Billable Hours** sheet to the end and name the copy **Data**.
16. Create a *PivotTable*.
- a. ☐ Select cell **A5** and click the **Table Name** box [*Table Design* tab, *Properties* group].
 - b. ☐ Name the table **tblHours**.
 - c. ☐ Click the *Summarize with PivotTable* button [*Table Design* tab, *Tools* group]. The range is identified as *tblHours*

