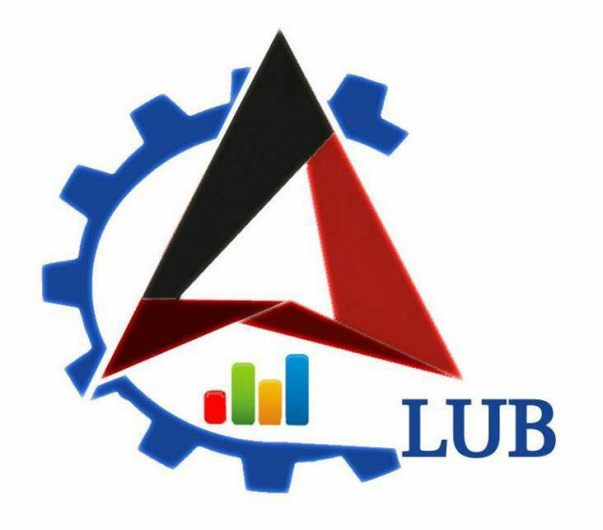


Final Assignment – Part 1

Great! You have now completed the Excel section of this course. In this assignment, you will open a CSV file in Excel for the web, convert it to an Excel format, and then clean and prepare the data.

Assignment Scenario

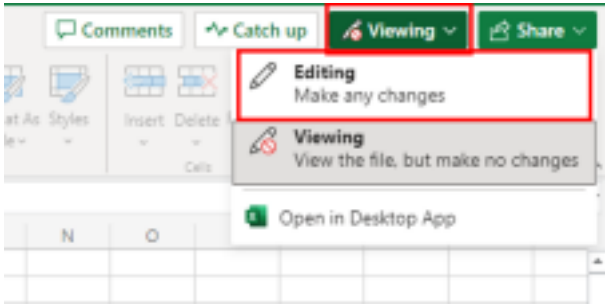
In this final assignment, you will be following the scenario of a recently hired Junior Data Analyst in a local government office, who has been tasked with importing some data from another department which relates to inventory information about their fleet of vehicles. The data is in comma-separated value (CSV) format and the data also needs cleaning up before you can start to run any kind of analysis on it.

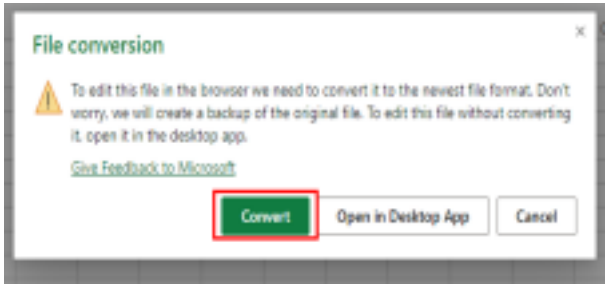
Guidelines for the Submission

Download the file Montgomery_Fleet_Equipment_Inventory_FA_PART_1_START.CSV. Upload and open the file with Excel for the web and convert it to an .XLSX file. Then clean the data as detailed below.

Tasks to perform:

1. **Save the CSV file as an XLSX file:** Change the ‘Viewing’ in the ToolTip to ‘Editing’ In Order to save the file as an XLSX file. The file is converted when you click ‘Convert’ in the prompt.





2. **Column widths:** Sort out the widths of all columns so that the data is clearly visible in all cells.

3. **Empty rows:** Use the Filter feature to look for blanks and remove all empty rows from the data.

4. **Duplicate records:** Use either the Conditional Formatting or Remove Duplicates feature to look for and remove any duplicate records from the data.

5. **Spelling:** The original source file data has not been checked for errors in the spelling. Check for spelling mistakes in the data and fix them. 6.

Whitespace: Use the Find and Replace feature to remove all double-spaces from the data.

7. **Department names:** When the data was converted from its data source, the department names (see correct list below) didn’t import correctly and they are now split over two columns in the data. Use Flash Fill to reduce the department names to just one column, and then remove any unnecessary columns.

Department	Department
Board of Elections	Economic Development
Circuit Court	Environmental Protection
Community Engagement Cluster	Finance
Community Use of Public Facilities	Fire and Rescue
Consumer Protection	General Services
Correction and Rehabilitation	Health and Human Services
County Executive's Office	

8. **Download your workbook:** Use ‘Save As’ and select ‘Download a copy’ to download your completed workbook as **Montgomery_Fleet_Equipment_Inventory_FA_PART_1_END.XLSX**.

Final Assignment – Part 2

You have now completed the first part of this final assignment. In this second part of the final assignment, you will take some cleaned and prepared data and create some pivot tables from it to help you analyze the data.

Assignment Scenario

In this final assignment, you will be following the scenario of a recently hired Junior Data Analyst in a local government office, who has been tasked with sorting and analyzing fleet inventory data that was previously imported and cleaned. You plan to use pivot tables to analyze the data in preparation for the results to be visualized in a dashboard and added to a data findings report later.

Guidelines for the Submission

Download and open the Montgomery_Fleet_Equipment_Inventory_FA_PART_2_START.XLSX file in Excel for the web.

Tasks to perform:

1. **Format the data as a table:** Use the Format as Table option to format the data as a table.
2. **Use AutoSum to calculate values:** Use AutoSum to find the following values for column 'C' and record each of the values:

   SUM
   AVERAGE
   MIN
   MAX
   COUNT

3. **Create a Pivot Table:** Use the PivotTable feature to create a pivot table that displays the Department field in the Rows section, and the Equipment Count in

the Values section, so that the pivot table displays the sum of equipment count by department.

4. **Sort the pivot table data:** Use the Sort By Value setting on the pivot table to sort it in descending order by the sum of equipment count.

5. **Make two more pivot tables exactly the same as task 3:** Follow the same steps you performed in Tasks 3 and 4 to create two more identical pivot tables so that you end up with 3 worksheets that contain identical pivot tables.

6. **Analyze data in the pivot table:** Use the PivotTable Fields pane to manipulate and analyze data in the two copied pivot table as follows:

   In pivot table 2 add the Equipment Class field below the Department field so that the different vehicle types appear under each department with their respective counts.
   Collapse all fields except the top one - **Transportation**
   In pivot table 3 add the Equipment Class field above the Department field so that the different vehicle types appear first, with the different departments listed underneath each vehicle type with their respective counts.
   Collapse all fields except the top one - **CUV**

7. **Download your workbook:** Use ‘Save As ‘ And select ‘Download a copy’ to download your completed workbook as **Montgomery_Fleet_Equipment_Inventory_FA_PART_2_END.XLSX**.

Final Assignment- 3

In this part of the final assignment, you will use provided sample data to create some visualizations using Excel for the web.

Assignment Scenario

As a regional manager for a chain of car dealerships you need to create some visualizations to allow you to understand your car sales and profits for each dealer.

Guidelines for the Submission

Download the file CarSalesByModelStart.xlsx. Upload and open the file in Excel for the web.

Create visualizations for the following captured KPI metrics:

1. **'Quantity Sold' by 'Dealer ID'** - as a bar chart, sorted in either ascending or descending order of quantity sold, and change the chart title to "Quantity Sold by Dealer ID" (Hint: Use the pivot table on Sheet1, and use 'Format' on the 'Chart' tab to change the chart title)
2. **'Profit' by 'Date' and 'Model'** - as a line chart, and give the chart a title of "Profit by Date and Model" (Hint: Use the pivot table on Sheet2, and use 'Chart Title' on the 'Chart' tab to change the chart title)
3. **'Profit' by 'Year' and 'Dealer ID'** - as a column chart, titled "Profit by Year and Dealer ID" with the data columns in red (Hint: Use the pivot table on Sheet3, and use 'Format' on the 'Chart' tab to change the chart title and to format the 'series' fill color in red)
4. **'Sum of Profits' for 'Hudson model cars' by 'Dealer ID'** - as a line chart, titled "Profit of Hudson Models by Dealer ID". Also remove the horizontal gridlines from the chart, put the legend on the right side of the chart, and color the series outline in green. (Hint: Use the pivot table on Sheet4, use 'Grid Lines' in the 'Axes' group on the 'Chart' tab to remove the gridlines, and use 'Format' on the 'Chart' tab to change the chart title, to move the legend, and to format the 'series' outline color in green)
5. **Save your workbook:** Use 'Save As' to save your completed workbook as **CarSalesByModelEnd.xlsx**

HAPPY LEARNING!