Final Assignment - Part 2: Analyze the Data

Estimated time needed: 45 minutes

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.

Software Used in this Assignment

The instruction videos in this course use the full Excel Desktop version as this has all the available product features, but for the hands-on labs we will be using the free 'Excel for the web' version as this is available to everyone.

Although you can use the Excel Desktop software if you have access to this version, it is recommended that you use Excel for the web for the hands-on labs as the lab instructions specifically refer to this version, and there are some small differences in the interface and available features.

Dataset Used in this Assignment

The dataset used in this lab comes from the following source:

https://data.montgomerycountymd.gov/Government/Fleet-Equipment-Inventory/93vc-wpdr under a **Public Domain license**.

We are using a modified subset of that dataset for the lab, so to follow the lab instructions successfully please use the dataset provided with the lab, rather than the dataset from the original source.

Assignment Scenario

In this final assigment, 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.

Use the course videos from Module 4 and the lab 'Hands-on Lab 7: Using Pivot Tables' to help you complete these tasks.

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.

8. **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**.

You can check the file after the changes attached below :
Montgomery_Fleet_Equipment_Inventory_FA_PART_2_END.XLSX