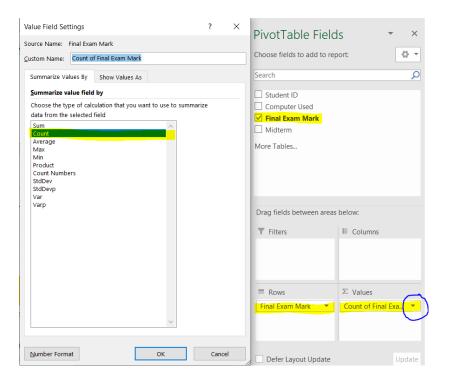
Appendix A – Side-By-Side Bar Graph w/ Ranges

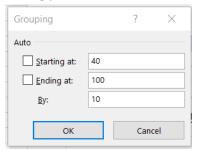
Creating a side-by side bar graph with two numerical variables expressed graphically in ranges requires some out-of-the-box thinking

A) Create Two Pivot Tables

(This is a summary of the method covered in Lab 3). Click on the data for ONE of the variables you are examining, and choose "Pivot Table" under "Insert" in the top ribbon. In the menu that appears at the side, drag your chosen variable into both the "Rows" and "Values" column. Left click on the variable name in the values column, and choose "Value Field Settings" to change the summarization method to "Count".



Right-click on any of the "Row Labels" of your pivot chart and choose "Group". Choose a starting and ending point, and size of each class. (Values outside of the range will be put in outlier groups.)

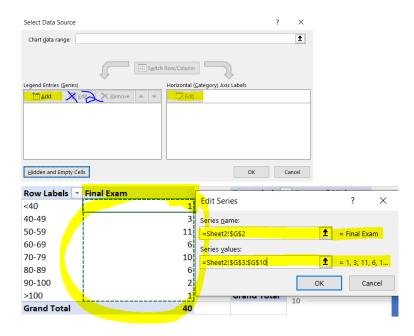


Repeat this process for the second variable. MAKE SURE TO USE THE SAME STARTING POINT, ENDING POINT, AND SIZE OF EACH CLASS.

B) Fool Excel Into Creating a Side-By-Side Bar Chart

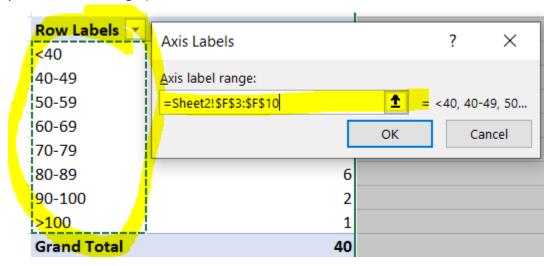
Clicking on any data, choose "Recommended Charts" under "Insert" in the top ribbon, and choose the appropriate chart (often called "Clustered Columns"). Right click on the cart and select "Select Data".

FIRST, under "Legend Entries", choose "Add". For the top field, click on the title beside "Row Labels" on your first Pivot Table. (It should originally read "Count of [NAME OF VARIABLE]"; you can change the title in the spreadsheet first, if you'd like). In the bottom field, erase the entry and choose all the values below the title. Repeat for the second variable using the second Pivot Table.

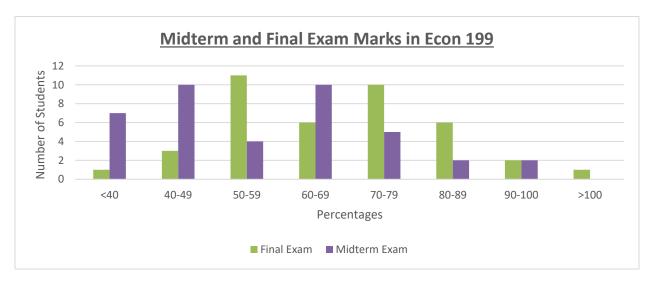


SECOND, under "Horizontal Axis Labels", choose "Edit" and for entry box select all the ranges under "Row Labels" from either Pivot Table (this is why the pivot tables must have the same start points, end

points and class ranges).



Add titles and edit as appropriate (see Lab 3 for details), and your final chart should look something like:



Congratulations! You've beaten Microsoft Excel!