



- Name: _____
 - Date: _____
 - Section: _____
-

BUSI 201: Business Data Analysis

Quiz #3: Filters, Sorting, and Charts

INSTRUCTIONS:

- BUSI201-Q03-Workbook.xlsx is the companion workbook for this quiz.
- The workbook consists of 12 worksheets: 4 FILTER sheets, 4 COND sheets, and 4 CHART sheets.
- The quiz booklet contains 3 problems, each corresponding to 4 of the worksheets.
- Once you are finished, save/ rename the workbook to [YOUR_LOGIN_ID.xlsx](#), and submit your results via email to BPARK@monmouthcollege.edu.
- Double-check your submission email for your attached file, file name, and receiver's email address, as you will not be permitted to submit or update your solutions past the in-class deadline.

Problem #1. Filtering and Sorting: 25 Points

The four tasks that make up the first problem of this quiz is related to applying filters to, and sorting existing data. Manually hiding, deleting, or reordering data will NOT result in any credit towards this problem.

1. Basic Filtering (5 Points)

- Navigate to worksheet FILTER-P01.
- Apply a filter so that only stock data from the month of July 2023 is visible to the reader.

2. Basic Filtering (5 Points)

- Navigate to worksheet FILTER-P02.
- Apply a filter to the stock data in worksheet FILTER-P02 so that the August 2023 stock information of firms in the Technology sector is visible to the reader.

3. Filtering by Conditions (5 Points)

- Navigate to worksheet FILTER-P03.
- Apply a filter to the population data in worksheet FILTER-P03 so that only counties with a population greater than or equal to 20,000 is visible to the reader.

4. Sorting (10 Points)

- Navigate to worksheet FILTER-P04.
- Sort the used car sales data so that we see the MAKE by alphabetical order, and within each MAKE, sort by low to high prices. See the table below for an example.

Make	Price
A	\$15,000
A	\$18,500
B	\$12,000
B	\$14,000

Problem #2. Conditional Formatting and Sparklines: 35 Points

The four tasks that make up the second problem of this quiz is related to applying conditional formatting to the data. Manually changing the formats will NOT be given any credit towards this problem.

1. Conditional Formatting (5 Points)

- Navigate to worksheet COND-P01.
- Apply conditional formatting to the data so that entries (cells) that show a growth in productivity have a green background.
- Apply conditional formatting to the data so that entries (cells) that show a fall in productivity have red text colors.

2. Conditional Formatting (10 Points)

- Navigate to worksheet COND-P02.
- Apply conditional formatting to the data so that the top 15 quarters where the growth in productivity was the greatest to have a green background color and white text font.
- Apply conditional formatting to the data so that the bottom 20% of quarters where the growth in productivity was the lowest to have a red background color and white text font.

3. Conditional Formatting (10 Points)

- Navigate to worksheet COND-P03.
- Apply conditional formatting to the data so that the entry of each year (the entire row) where the Annual growth rate is greater or equal to 2.5% has a green cell background color.
- In other words, if the value for Annual is greater or equal to 2.5, the row should have a green background.

4. Sparklines (10 Points)

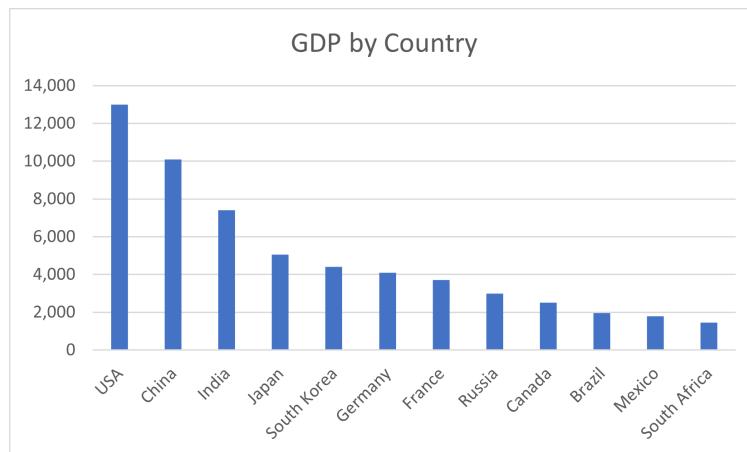
- Navigate to worksheet COND-P04.
- Fill the empty Trend column with sparklines representing the fluctuation of changes in productivity by quarter for each year.
- In other words, each cell in the Trend column should have a sparkline illustrating the changes in productivity for the 4 cells to its left.

Problem #3. Charts: 40 Points

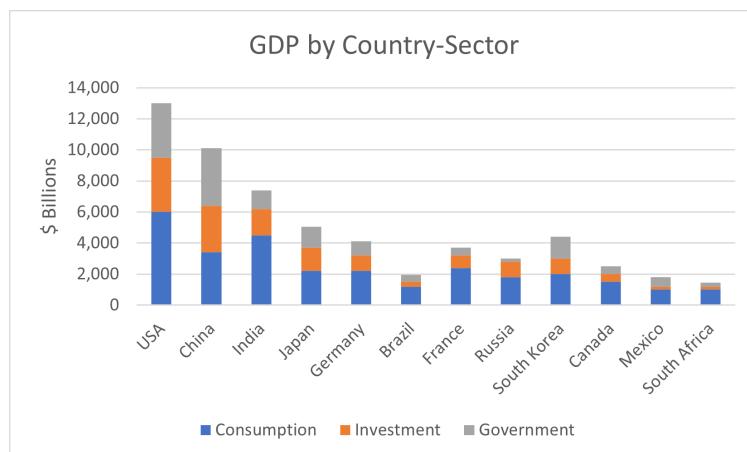
The four tasks that make up the last problem of this quiz is related to creating charts to visualize data.

1. Bar Charts: CHART-P01 (5 Points)

- Use the data to replicate the following chart. You do not need to match the exact color of the bars, but all other elements must match exactly.

**2. Bar Charts: CHART-P02 (10 Points)**

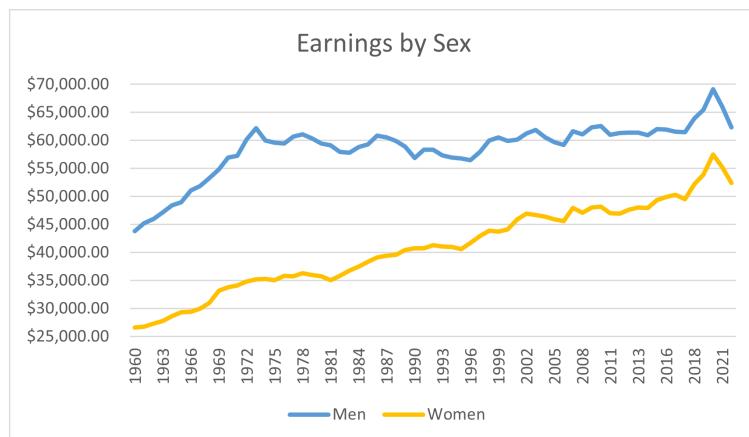
- Use the data to replicate the following chart. You do not need to match the exact colors of the bars, but all other elements must match exactly.



3. Line Charts: CHART-P03

(10 Points)

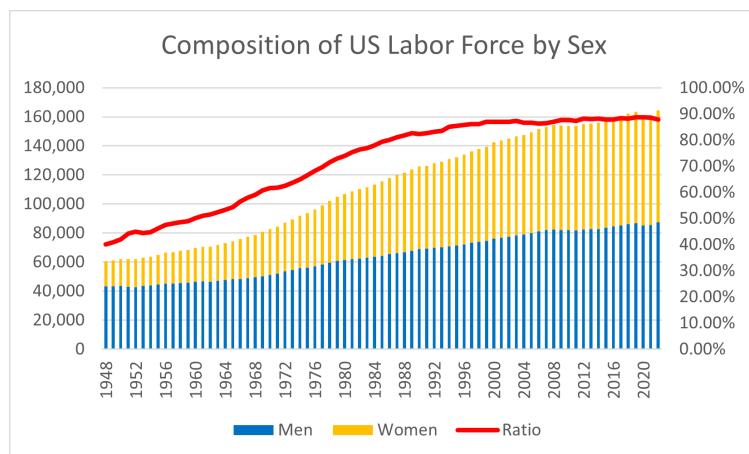
- Use the data to replicate the following chart. You do not need to match the exact colors of the lines, but all other elements must match exactly.



4. Combination of Charts: CHART-P04

(15 Points)

- Use the data to replicate the following chart. You do not need to match the exact colors of the bars and lines, but all other elements must match exactly.



• Original Score: _____

• Recovered Score: _____

• Original Date: _____

• Recovered Date: _____