



Monmouth
COLLEGE

- Name: _____
 - Date: _____
 - Section: Section 2 (2:00 PM ~ 2:50 PM)
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BUSI 201 Business Data Analysis

Quiz #4: Conditional Formatting

Spring 2024

INSTRUCTIONS:

- Credit will be awarded for the correct application of filters and conditional formatting, and no credit shall be awarded to manually formatted answers.
- Once you are finished, save/rename the workbook to [LoginID-quiz4.xlsx](#), and submit your results via email to BPARK@monmouthcollege.edu.
- [BUSI201-S2024-Q04-S02-Workbook.xlsx](#) is the companion workbook for this quiz.
- The workbook consists of 5 worksheets: Quiz4-Sheet01-S02 through Quiz4-Sheet05-S02
- The quiz booklet contains 2 problems.
- 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.
- The recovery rate for Quiz #4 will be 50%.

Problem #1. Productivity Growth

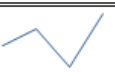

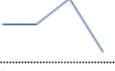
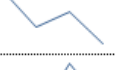

Problem 1 requires you to work on two worksheets, Quiz4-Sheet01-S02 and Quiz4-Sheet02-S02, which are essentially duplicates. Both worksheets contain real-world data on the growth of productivity in the US. Use the data in these worksheets to complete the following tasks. The figures need not exactly match the given example.

- 1.A. Navigate to the worksheet Quiz4-Sheet01-S02. Apply conditional formatting to the table so that the rows representing the data on years where the Annual growth rate is greater than or equal to 4%.

| % Change of Productivity (from US BLS) | | | | | |
|--|------|------|-------|------|--------|
| Year | Q1 | Q2 | Q3 | Q4 | Annual |
| 1947 | 0 | 9.4 | -11.7 | 18 | 5.23 |
| 1948 | 1.8 | -1 | 0.4 | 1.7 | 0.73 |
| 1949 | 4.1 | 4.2 | 9.9 | -2.1 | 4.03 |
| 1950 | 14.4 | 5 | 9 | 0.7 | 7.28 |
| 1951 | 0.5 | -1.2 | 9.2 | 1.2 | 2.43 |
| 1952 | 2.1 | -0.8 | -1.9 | 8.7 | 2.03 |
| 1953 | 3.5 | 0.9 | 1.7 | -1.4 | 1.18 |

- 1.B. Navigate to the worksheet Quiz4-Sheet02-S02. Create a new column named Trend between Year and Q1, and use sparklines to plot each year's quarterly change of productivity as shown in the Red Box below.

- 1.C. Staying in worksheet Quiz4-Sheet02-S02, apply conditional formatting to the data so that the top 50% of quarterly growth rates are highlighted as shown in the Blue Box below.

| % Change of Productivity (from US BLS) | | | | | |
|--|---|------|------|-------|------|
| Year | Trend | Q1 | Q2 | Q3 | Q4 |
| 1947 |  | 0 | 9.4 | -11.7 | 18 |
| 1948 |  | 1.8 | -1 | 0.4 | 1.7 |
| 1949 |  | 4.1 | 4.2 | 9.9 | -2.1 |
| 1950 |  | 14.4 | 5 | 9 | 0.7 |
| 1951 |  | 0.5 | -1.2 | 9.2 | 1.2 |

Problem #2. Filtering and Sorting

Problem 2 requires you to work on three worksheets, Quiz4-Sheet03-S02, Quiz4-Sheet04-S02, and Quiz4-Sheet05-S02.

- 2.A. Navigate to the worksheet Quiz4-Sheet03-S02. Apply filters such that only counties with a population greater than or equal to 20,000 is visible to the reader.
- 2.B. Navigate to the worksheet Quiz4-Sheet04-S02. Apply filters such that only information on stock in the Technology sector in August 2023 is visible to the reader.
- 2.C. Navigate to the worksheet Quiz4-Sheet05-S02. Sort the data such that the listing is sorted alphabetically by Make, and then by lower Price as shown in the figure below.

| Make | Model | Year | Mileage | Price |
|-----------|-----------|------|---------|--------------|
| Chevrolet | Malibu | 2016 | 65,000 | \$ 11,500.00 |
| Chevrolet | Equinox | 2015 | 55,000 | \$ 13,200.00 |
| Chevrolet | Silverado | 2016 | 56,000 | \$ 23,500.00 |
| Chevrolet | Camaro | 2017 | 27,000 | \$ 29,500.00 |
| Ford | Taurus | 2016 | 50,000 | \$ 12,000.00 |
| Ford | Fusion | 2017 | 30,000 | \$ 14,500.00 |
| Ford | Escape | 2019 | 22,000 | \$ 19,800.00 |
| Ford | Edge | 2018 | 39,000 | \$ 20,000.00 |
| Ford | Explorer | 2018 | 42,000 | \$ 22,000.00 |
| Ford | F-150 | 2017 | 60,000 | \$ 25,500.00 |
| Ford | Mustang | 2017 | 29,000 | \$ 28,000.00 |
| GMC | Acadia | 2016 | 60,000 | \$ 18,500.00 |
| GMC | Sierra | 2016 | 62,000 | \$ 26,000.00 |

• Original Score: _____

• Recovered Score: _____

• Original Date: _____

• Recovered Date: _____