# **Discussion Prompt: Exploring Excel Macros**

### Introduction:

Excel macros are powerful tools that allow users to automate tasks, increase efficiency, and enhance the functionality of Excel spreadsheets. In this discussion, let's delve into the world of Excel macros by finding and explaining an example that showcases their capabilities.

## Prompt:

- 1. Finding an Example: Search for a real-world example of an Excel macro. This could be a specific task or process that is automated using macros. Find an example that interests you and has practical applications.
- 2. Explanation and Purpose: Share the example you found with the group. Explain the task or process that the macro automates. What is the purpose of automating this task? How does the macro enhance efficiency or accuracy?
- 3. Macro Components: If possible, break down the components of the macro. Discuss any coding or scripting involved. What actions or commands does the macro include? How does it interact with Excel's features?
- 4. Benefits and Challenges: Discuss the benefits of using a macro in this context. How does it save time, reduce errors, or improve the overall workflow? Are there any potential challenges or limitations associated with using macros for this task?
- 5. Customization and Adaptability: Consider whether the macro can be customized or adapted for different scenarios. Can users modify the macro's behavior to suit their needs, or is it designed for a specific purpose?
- 6. Learning Resources: Share any resources or tutorials you found that explain how to create similar macros. Are there online guides, videos, or courses that teach users how to implement this type of automation?
- 7. Security Considerations: Discuss any security considerations related to using macros in Excel. How can users ensure that the macros they download or create are safe and not a security risk?

## Conclusion:

Engage in a meaningful conversation with your peers about the example of an Excel macro you found. By exploring its functionalities, benefits, and potential challenges, we

can gain insights into the versatility and practicality of using macros to streamline tasks in Excel.

#### **Guidelines:**

- Actively participate in the discussion, respecting diverse viewpoints.
- Provide specific details about the example you found.
- Respond to at least two peers to foster a comprehensive exchange of insights.

Let's dive into the world of Excel macros and discover how they can enhance our productivity and efficiency!

#### from L07: Discussion- Data Organization

A macro that I identified allows you to find the top 10 values within a given selection of cells. (Bryan, 2019)

This macro allows you to select any range or group of cells within excel and, given the data contained is numeric, highlight the highest 10 values found within the selection. This is a similar type of function that can be performed in a database system that I could see being convenient for financial analysts to have access to without needing to access a different application.

There are three main sections of code to this macro. The first section specifies that only 10 values should be selected, and that selection is made based upon ranking by values. The second section specifies what color to make the text, and the third specifies what color to make the background of the matching top 10.

As mentioned before, having a quick way to lookup values without needing to leave Excel could be very beneficial, not just for convenience but as well if the data within the spreadsheet isn't somewhere within a database system. However, this won't update automatically if new data. The user would need to clear formatting and re-run the macro to get up to date results.

This is a somewhat customizable macro with the ability to change what color the text and background highlighting will be once the macro is run. However, there appears to be no means of changing the number of cells to be selected from 10 to another number. Those needing more flexible selection capability – or if you would like to flip this around for example and look for the lowest 10 – would need a different macro.

The visual basic reference manual on Microsoft's learn website seems to be a great resource for building/customizing scripts for all visual basic accepting applications. A somewhat similar example would be the *FormatConditions.AddAboveAverage* method which allows you to locate cells that lie either above or below the average of a selection of cells. (Microsoft, 2021)

The best means I could see for a user to ensure the macro they are using is safe, is to seek out a colleague who has experience working with visual basic code. If such a person is not available, copy and pasting sections of the code into Microsoft's manual on visual basic for applications should give them all the information needed to parse what each line is seeking to do.

#### References

Bryan. (2019, September 2). *Highlight Top 10 Values of Selection Using Macros In Excel*. Retrieved from myexcelonline.com: https://www.myexcelonline.com/blog/highlight-top-10-values-of-selection-using-macros-in-excel/

Microsoft. (2021, September 12). FormatConditions.AddAboveAverage method (Excel). Retrieved from learn.microsoft.com: https://learn.microsoft.com/en-us/office/vba/api/excel.formatconditions.addaboveaverage