

Intermediate Excel Data Analyst Interview Questions

27. What is an Excel chart, and how many types of charts are there?

A chart in Excel is a feature that allows you to display data through a range of visually intuitive graphs. These charts and graphs can make it easier and quicker to comprehend data, in comparison to just looking at the numbers on the worksheet. Available charts on Excel include:

- Bar graphs
- Line graphs
- Pie charts
- Area graph
- Scatter graphs
- Surface graphs
- Doughnut graphs
- Radar charts

Each of these charts have their advantages and disadvantages, based on the story you wish to tell your audience. Make sure you have a reason for choosing a specific chart, and that it is not emotion or random.

28. What is a Macro in Microsoft Excel?

A macro is a sequence of performable actions in Excel which have been recorded, saved, and named for easy use in the future.

A macro can then be called on whenever necessary to complete the sequence of actions without the user having to replicate each step manually. This saves valuable time and effort when performing repetitive tasks with larger sets of data. You might, for example, need to manipulate a data set in the same way every week, but it involves 15 steps to complete. By recording a macro, you can manipulate the data in a consistent way extremely quickly, with just a click of the button.

29. How do you standardize the formatting in the sheets of a workbook?

Formatting will automatically be copied to all selected sheets, so to apply a single format to all the sheets in a workbook, simply hold down Ctrl (or Cmd on Mac) to select every sheet. Only formatting edits will be copied over with this method, not data.

30. What is a relative cell address?

A relative cell address (or relative cell reference) is a cell address within a formula that does not include a \$ symbol before the row number or column letter. This means that when the formula is copied one column over, the cell address will change accordingly. The formula will calculate relative to its position, rather than displaying the calculation from the original position. This is why making formulas with absolute cell references is so important, as you often do not want your equations to roll forward automatically.

31. What is a drop-down list?

A drop-down list allows the creator of a spreadsheet to control the data inputted into certain cells. In other words, when the creator only wants one of four predetermined options to be used, instead of relying on potentially unreliable user inputs (misspellings, non-standard categories), they can ensure it is adhered to by having the users click an option from a drop-down list. Good inputs equal good outputs, and reducing the opportunities for manual entry will allow for better analysis down the line.

32. How do you use the Name Box function?

The Name Box is an input box above the Excel sheet, to the left of the formula bar. Its default mode displays the address of the currently selected cell, but it has other uses too. Firstly, the Name Box can be used to quickly select a specific cell or range of cells: typing in a cell reference like G8 will automatically navigate to the cell G8, and typing in a range of cells like G8:G30 will select all cells within that range. Secondly, the Name Box can be used to create a named range, and then can be used as a drop-down menu to navigate between your assorted named ranges.

33. What is the LOOKUP function in Microsoft Excel?

The LOOKUP function allows the user to find exact or partial matches in the spreadsheet. The VLOOKUP option lets the user search for data located in the vertical position. The HLOOKUP option functions in the same way but in the horizontal plane.

34. Can you use multiple data formats in Pivot Tables?

Data can be imported from a variety of sources by selecting the Data tab and clicking Get External Data > From Other Sources. Excel worksheet data, data feeds, text files and other such data formats can be imported, but you will need to create relationships between the imported tables and those in your worksheet before using them to create a pivot table.

35. How do you create a hyperlink in Excel?

To create a link in Excel, select the element you wish to use as the anchor (this can be a cell or an object like a picture). You can then use a variety of pathways: select Link from the Insert tab, right-click and select Link on the menu, or press Ctrl+K. This will bring up a series of options that will allow you to indicate what kind of content you would like to link to, such as a file, a web page, a specific location or an email address.

36. How do you find the day of the week for a particular date in an Excel sheet?

You can do this by using the WEEKDAY function. First, enter the formula in the required cell, WEEKDAY(A1,1). The second argument (1) determines to what day excel will assign the value. Press Enter, and the Formula will return 3, meaning that your date is the 3rd day of the week.

37. What are the benefits of using the SHEET formula?

When working in a massive workbook with many sheet tabs, it can be helpful to know that you are looking at the correct sheet and not missing any hidden tabs. The SHEET formula returns the number of the sheet you are in, such that the second sheet tab would return a value of 2. This is beneficial as an organizational tool.

38. How do you build a Pivot Table?

- Click on the Data tab in the ribbon section.
- Then, click the Data Validation button in the Data Tools group
- Navigate to Configurations>Allow>List
- Select an array for the source list

39. What is the default value of the last parameter of the VLOOKUP function?

If the last parameter is not specified via TRUE or FALSE, the return value will default to TRUE (approximate), and show an approximate match for your request. This is usually not what you are looking to accomplish, as the typical use case for VLOOKUP is to find an exact match.

40. How do you refresh a Pivot Table?

There are several methods to refresh a pivot table without making a new one from scratch:

1. Click the pivot table, select Analyze, and then select Refresh from the pivot table tools menu.
2. Right-click the pivot table and select Refresh.
3. Use the keyboard shortcut Alt+F5.

You can also refresh all pivot tables within a workbook at once by selecting the arrow underneath the Refresh button in the pivot table tools menu, and select Refresh All.

41. What is the most common error message in Excel?

The most common error message in Excel is the ##### error message, which is displayed when a cell is not large enough to display all the data that has been inputted into it. To solve this error message, simply drag the cell to increase its width or depth.

Other common errors include #VALUE! , which results when a portion of the data you are trying to analyze has a different format than the rest, or #NAME! , when the formula was written incorrectly and is not processing as it should.

42. How do you find duplicate values in a column in Excel?

To find but not delete duplicates in a column, select the target range of data and navigate to the Style group on the Home tab. Here, click the arrow next to Conditional Formatting. You will then be able to choose Highlight Cell Rules, Duplicate Values, and enter the values you wish to find duplicates of. This will highlight duplicates of the values you entered, but will not manipulate the data within.

43. What are Macro languages in Excel?

Macros for Excel are written in VBA (Visual Basic for Applications). You can use VBA to manually type out actions for a macro yourself, or you can “record” actions using the Macro Recorder in Excel, and the software will convert these to VBA code for you. Once you become stronger in VBA, you can review recorded macros and perform the updates yourself to tweak your use cases.

44. How do you extract unique values in Excel?

You can find unique values by selecting the desired range of data and navigating to Data > Sort & Filter > Advanced. To permanently delete duplicate values and create a list of unique values only, click Data > Data Tools > Remove Duplicates.

45. How do you create Cross-Tabulation in Excel?

The product of the pivot table feature in Excel is often referred to in other software as a contingency table or cross-tabulation. To create a “crosstab” use the PivotTable option on the Insert tab.

46. What are Freeze Panes?

The Freeze Pane function in Excel serves to lock rows or columns of a sheet so that they are always visible. This can be found on the View Tab of the ribbon. This is often helpful when you want to keep headers of columns in view, or perhaps the identifier of a row while scrolling right.

47. What is the difference between “Relative”, “Absolute”, and “Mixed” cell references in Excel?

In Excel, when copying formulas from one cell to another, the way cell references are treated can differ depending on their type:

- **Relative reference (e.g., A1):** When copying this type of reference from one cell to another, it adjusts based on the relative position of the cell. For instance, if you copy a formula from cell B2 that references A1 to cell B3, the reference will automatically change to A2.
- **Absolute reference (e.g., A1):** This reference type remains constant regardless of where you copy the formula. It will always refer to the specified cell.
- **Mixed reference (e.g., A1 or A1):** In this type, one part (either row or column) remains constant while the other part adjusts. If you copy the formula with A1 from cell B2 to B3, it will still reference A1. However, if copied from B2 to C2, the reference will change to B1.

By understanding and using these references effectively, data analysts can make their spreadsheets more dynamic and reduce errors during data manipulation. It also helps if they need to quickly scale formulas across dozens or hundreds of columns and rows.

48. How do you apply conditional formatting in Excel to highlight cells with values above a certain threshold?

To apply conditional formatting in Excel to highlight cells with values above a certain threshold, first select the range of cells you want to format. Then, go to the “Home” tab, click on “Conditional Formatting,” and choose “New Rule.” In the New Formatting Rule dialog box, select “Format cells that contain,” then set the condition to “greater than” and input the threshold value. Choose the formatting style you want to apply (e.g., fill color), and click “OK.”