

Advanced Excel Interview Questions and Answer

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1. What is Excel, and why is it important for data analysis?

Answer: Excel is a spreadsheet program developed by Microsoft that allows users to organize, format, and calculate data with formulas. It is important for data analysis due to its powerful functions, data visualization capabilities, and ease of use for managing large datasets.

2. How do you create a pivot table in Excel?

Answer: To create a pivot table, go to the Insert tab, click on PivotTable, select the data range, choose the location for the pivot table, and then drag and drop fields into the Rows, Columns, Values, and Filters areas.

3. What are the common data formats in Excel?

Answer: Common data formats in Excel include Number, Currency, Accounting, Date, Time, Percentage, Fraction, Scientific, Text, and Custom.

4. Explain the VLOOKUP function and its syntax.

Answer: VLOOKUP stands for Vertical Lookup. It searches for a value in the first column of a table and returns a value in the same row from another column. Syntax: VLOOKUP(lookup_value, table_array, col_index_num, [range_lookup]).

5. How can you remove duplicates from a dataset in Excel?

Answer: Select the data range, go to the Data tab, click on Remove Duplicates, and choose the columns from which you want to remove duplicates.

6. What is the difference between CONCATENATE and CONCAT?

Answer: CONCATENATE is an older function that joins two or more strings together, whereas CONCAT is a newer function (Excel 2016 and later) that does the same but supports a range of cells as arguments.

7. How do you use conditional formatting in Excel?

Answer: Select the range of cells, go to the Home tab, click on Conditional Formatting, choose the rule type (e.g., Highlight Cell Rules, Top/Bottom Rules, Data Bars, Color Scales, Icon Sets), and set the formatting criteria.

8. Explain the IF function and provide an example.

Answer: The IF function checks whether a condition is met and returns one value if true and another if false. Syntax: IF(logical_test, value_if_true, value_if_false). Example: =IF(A1>10, "Pass", "Fail").

9. How do you use the INDEX and MATCH functions together?

Answer: INDEX returns the value of a cell in a specified row and column of a range, while MATCH returns the relative position of a value in a range. Combined, they can look up values dynamically. Example: =INDEX(B1:B10, MATCH(D1, A1:A10, 0)).

10. What are Excel macros, and how are they used?

Answer: Macros are recorded sequences of actions in Excel that can be replayed to automate repetitive tasks. They are written in VBA (Visual Basic for Applications).

11. Describe the SUMIF function.

Answer: SUMIF adds all numbers in a range based on a single condition. Syntax: SUMIF(range, criteria, [sum_range]).

12. What is the purpose of the COUNTIF function?

Answer: COUNTIF counts the number of cells in a range that meet a specified condition. Syntax: COUNTIF(range, criteria).

13. How do you protect a worksheet in Excel?

Answer: Go to the Review tab, click on Protect Sheet, set a password (optional), and select the elements you want to allow users to edit.

14. Explain the difference between a workbook and a worksheet.

Answer: A workbook is an Excel file containing one or more worksheets (spreadsheets). A worksheet is a single spreadsheet within a workbook.

15. How can you filter data in Excel?

Answer: Select the data range, go to the Data tab, click on Filter, and use the drop-down arrows in the column headers to filter data based on specific criteria.

16. What is the purpose of the TEXT function?

Answer: The TEXT function converts a value to text in a specified number format. Syntax: TEXT(value, format_text).

17. How do you use the PMT function in Excel?

Answer: PMT calculates the payment for a loan based on constant payments and a constant interest rate. Syntax: PMT(rate, nper, pv, [fv], [type]).

18. Describe the use of the LEFT, RIGHT, and MID functions.

Answer: LEFT returns the first characters in a string, RIGHT returns the last characters, and MID returns a specific number of characters from a starting point. Syntax: LEFT(text, [num_chars]), RIGHT(text, [num_chars]), MID(text, start_num, num_chars).

19. How do you create a chart in Excel?

Answer: Select the data range, go to the Insert tab, choose the desired chart type from the Charts group, and customize the chart as needed.

20. What is the difference between absolute, relative, and mixed cell references?

Answer: Absolute references (e.g., \$A\$1) do not change when copied, relative references (e.g., A1) change relative to their new position, and mixed references (e.g., \$A1 or A\$1) have either the row or column fixed.

21. Explain the purpose of the Pivot Chart.

Answer: A Pivot Chart is a graphical representation of data in a PivotTable, allowing for easy visualization and analysis of complex data.

22. How do you use the HLOOKUP function?

Answer: HLOOKUP stands for Horizontal Lookup. It searches for a value in the first row of a table and returns a value in the same column from another row. Syntax: HLOOKUP(lookup_value, table_array, row_index_num, [range_lookup]).

23. What is the purpose of the SUBSTITUTE function?

Answer: SUBSTITUTE replaces occurrences of a specified text in a string with new text. Syntax: SUBSTITUTE(text, old_text, new_text, [instance_num]).

24. Describe the purpose of data validation in Excel.

Answer: Data validation restricts the type of data or values that users can enter into a cell, ensuring data accuracy and consistency. It is set up through the Data tab under Data Validation.

25. How do you use the TRANSPOSE function?

Answer: TRANSPOSE converts a vertical range of cells to a horizontal range, or vice versa. Syntax: TRANSPOSE(array).

26. Explain the use of the CONCATENATE function with an example.

Answer: CONCATENATE joins two or more text strings into one string. Example: =CONCATENATE("Hello, ", "World!") returns "Hello, World!".

27. What is a dynamic range in Excel, and how is it created?

Answer: A dynamic range automatically expands or contracts based on the data. It can be created using formulas like OFFSET or Excel Tables, which update automatically with new data.

28. How do you freeze panes in Excel?

Answer: Go to the View tab, select Freeze Panes, and choose the desired option (Freeze Panes, Freeze Top Row, Freeze First Column) to keep specific rows or columns visible while scrolling.

29. Describe the use of the AVERAGE function.

Answer: AVERAGE calculates the arithmetic mean of a range of numbers. Syntax: AVERAGE(number1, [number2], ...).

30. How do you apply conditional formatting based on a formula?

Answer: Select the range, go to Conditional Formatting, choose New Rule, select "Use a formula to determine which cells to format," and enter the formula. Set the formatting criteria.

31. What is the use of the TRIM function in Excel?

Answer: TRIM removes extra spaces from a text string, leaving only single spaces between words. Syntax: TRIM(text).

32. How do you use the OFFSET function?

Answer: OFFSET returns a reference to a range that is a specified number of rows and columns from a starting cell. Syntax: OFFSET(reference, rows, cols, [height], [width]).

33. Explain the purpose of the SUMPRODUCT function.

Answer: SUMPRODUCT multiplies corresponding elements in arrays and returns the sum of those products. Syntax: SUMPRODUCT(array1, [array2], ...).

34. How do you create a drop-down list in Excel?

Answer: Select the cell range, go to Data Validation, choose List under Allow, and enter the list of values or reference a range containing the values.

35. What is the purpose of the NETWORKDAYS function?

Answer: NETWORKDAYS calculates the number of working days between two dates, excluding weekends and optionally specified holidays. Syntax: NETWORKDAYS(start_date, end_date, [holidays]).

36. How do you use the LARGE and SMALL functions?

Answer: LARGE returns the k-th largest value, and SMALL returns the k-th smallest value in a range. Syntax: LARGE(array, k), SMALL(array, k).

37. What is the purpose of the RAND and RANDBETWEEN functions?

Answer: RAND generates a random number between 0 and 1. RANDBETWEEN generates a random integer between two specified numbers. Syntax: RAND(), RANDBETWEEN(bottom, top).

38. How do you use the ROUND, ROUNDUP, and ROUNDDOWN functions?

Answer: ROUND rounds a number to a specified number of digits, ROUNDUP always rounds up, and ROUNDDOWN always rounds down. Syntax: ROUND(number, num_digits), ROUNDUP(number, num_digits), ROUNDDOWN(number, num_digits).

39. Explain the use of the REPLACE function.

Answer: REPLACE replaces part of a text string with another text string. Syntax: REPLACE(old_text, start_num, num_chars, new_text).

40. How do you split text into columns using Text to Columns?

Answer: Select the range, go to Data tab, click Text to Columns, choose Delimited or Fixed Width, and follow the wizard to split text into columns based on specified criteria.

41. What is the purpose of the FIND and SEARCH functions?

Answer: FIND returns the position of a substring within a string, case-sensitive. SEARCH does the same but is not case-sensitive. Syntax: FIND(find_text, within_text, [start_num]), SEARCH(find_text, within_text, [start_num]).

42. How do you use the IFERROR function?

Answer: IFERROR returns a value you specify if a formula evaluates to an error; otherwise, it returns the result of the formula. Syntax: IFERROR(value, value_if_error).

43. Describe the purpose of the DATEDIF function.

Answer: DATEDIF calculates the difference between two dates in years, months, or days. Syntax: DATEDIF(start_date, end_date, unit).

44. What is a named range, and how do you create one?

Answer: A named range is a descriptive name for a collection of cells or a single cell. Create it by selecting the range, typing a name in the Name Box, and pressing Enter.

45. How do you use the SUBSTITUTE function to replace multiple instances of a text string?

Answer: SUBSTITUTE replaces occurrences of specified text in a string with new text. You can use it nested to replace multiple instances. Example: =SUBSTITUTE(SUBSTITUTE(A1, "old1", "new1"), "old2", "new2").

46. Explain the purpose of array formulas.

Answer: Array formulas perform multiple calculations on one or more items in an array, returning one or multiple results. Enter them by pressing Ctrl+Shift+Enter.

47. What is the purpose of the ISERROR function?

Answer: ISERROR checks whether a value is an error and returns TRUE or FALSE. Syntax: ISERROR(value).

48. How do you use the CHOOSE function?

Answer: CHOOSE returns a value from a list of values based on an index number. Syntax: CHOOSE(index_num, value1, [value2], ...).

49. What is the purpose of the WORKDAY function?

Answer: WORKDAY returns a date that is a specified number of working days from a start date, excluding weekends and optionally specified holidays. Syntax: WORKDAY(start_date, days, [holidays]).

50. How do you create a histogram in Excel?

Answer: Select the data, go to the Insert tab, choose the Histogram option from the Charts group, and customize as needed.

Excel Interview Questions for Freshers

1. What is a cell address in Excel?

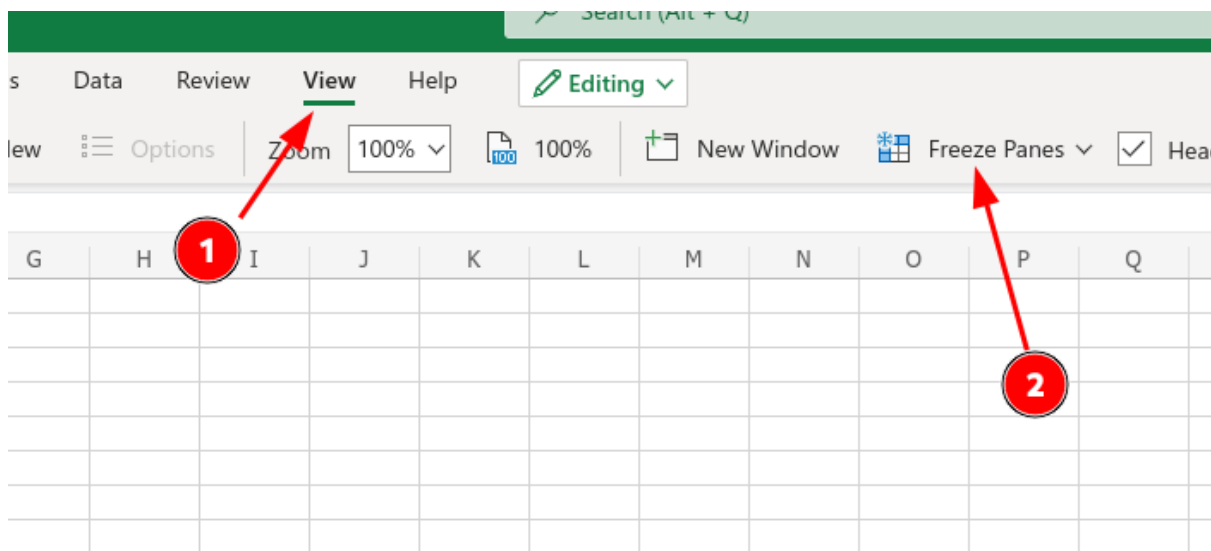
Ans: Questions related to cell address are very important if we consider excel interview questions. A cell address is an address that is used to identify a specific cell in the sheet. A combination of the relevant column letter and a row number is used to denote it.

Cell Address

2. What is Freeze Panes in MS-Excel?

Ans: This is one of the important excel interview questions. Any row or column can be locked using Freeze Panes. Even if we scroll the sheet vertically or horizontally, the locked row or column will remain visible on the screen.

You can find the freeze pane by clicking on the view panel.



Freeze Panes

3. What is the difference between count, counta, and countblank?

Ans: Here's the difference between count, counta and countblank function.

- **count:** Calculate the total number of cells containing only numeric values. Cells with string values, special characters, or blank cells will be ignored.

File Home Insert Draw Page Layout Formulas

Undo

Cut

Paste

Calibri

11

A

B

B8

fx

=COUNT(B1:B7)

	A	B	C	D	E	F
1		Marks				
2		97				
3		88				
4		91				
5		N/A				
6						
7		78				
8	Total Number of Cells Containing Numeric Values:	4				
9						
10						

- **counta:** Calculate the total number of cell containing any content. Blank cells will be ignored.

File Home Insert Draw Page Layout Formulas							
		Calibri	11	A	B	I	
B8			<i>f_x</i>	=COUNTA(B1:B7)			
	A	B	C	D	E	F	G
1		Marks					
2		97					
3		88					
4		91					
5		N/A					
6							
7		78					
8	Total Number of Cells Containing Any Content:	6					
9							
10							
11							

- **countblank:** It only counts the amount of blank cells, as the name implies. Content-filled cells will not be taken into account.

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fx

=COUNTBLANK(B1:B7)

	A	B	C	D	E	F	G
1		Marks					
2		97					
3		88					
4		91					
5		N/A					
6							
7		78					
8	Total Number of Blank Cells	1					
9							
10							
11							
12							
13							
14							

4. What is the shortcut to add a filter to a table?

Ans: When you wish to display only specified data from the complete dataset, you utilise the filter method. There is no change to the data as a result of this. Ctrl+Shift+L is a keyboard shortcut for adding a filter to a table.

5. How do you create a hyperlink in Excel?

Ans: Hyperlinks are used to link worksheets and files/websites together. Ctrl+K is the shortcut for making a hyperlink. The box titled "Insert Hyperlink" appears. Fill in the address and the text that will be displayed.

The above dialog box will appear after clicking CTRL+K.

6. What is Ribbon?

Ans: The ribbon is a section of the application that runs along the top and contains all of the menu buttons and toolbars available in Excel. The ribbon is divided into tabs, each of which has a set of commands for usage in the software.

7. How many report formats are available in Excel?

Ans: There are 3 report formats that are available in Excel.

- Compact Form
- Outline Form
- Tabular Form

8. What are the wildcards in Excel?

Ans: There are 3 wildcards available in Excel.

- **Asterisk (*):** This wildcard can be used to match any character. For example, “Ni*” can be matched with "Ninja ", "Nick ", "Nice ", and many more starting with “Ni”.
- **Question Mark (?):** This is used to match any single character. For example, “Ninj?” will match with “Ninja”.
- **Tilde (~):** It's used to find a wildcard character (*, ?, ~) in a block of text.

9. Is it possible to create a Pivot Table using multiple sources of data?

Ans: Yes, a pivot table may be made from several sheets. There must be a common row in both tables for this to work. This will be the first table's primary key and the second table's foreign key. Create a link between the tables before constructing the pivot table.

10. How many data formats are available in Excel?

Ans: This is a very important question considering excel interview questions. In Excel, there are 11 different types of data formats.

- **Number:** It is commonly used for displaying numbers.
- **Currency:** Currency is a term that refers to monetary formats in general.
- **Accounting:** The currency symbols and decimal points are aligned in a column.
- **Date:** Date and time serial numbers are displayed as data values.
- **Time:** Date and time serial numbers are displayed as date values in time formats.
- **Percentage:** Multiply the cell value by 100 and display the result as a percentage.
- **Fraction:** They show the values of the cells as a fraction.

- **Scientific:** The cell values are displayed in a scientific manner.
- **Text:** Text format cells are handled as text even if they contain a number; the cell is presented precisely as it was entered.
- **Special:** They're particularly useful for keeping track of list and database values.
- **Custom:** Using one of the existing codes as a starting point, type the number format code.

Excel Intermediate Interview Questions

11. What is the IF function in Excel?

Ans: It determines whether or not specific criteria are true. If the condition is true, the result or output will be as expected. If the condition is false, the result or output will be different.

For example,

In B8 Column, 70 is printed as the condition B7 > 50 results in true.

12. Which function is used to determine the day of the week for a date?

Ans: We can use the WEEKDAY() function to determine the day of the week. It returns the day of the week and starts counting the day from Sunday.

13. What is the AND function in Excel?

Ans: The AND function, like the IF function, performs a logical function and it is important considering excel interview questions. The AND function will analyze at least one mathematical expression in another cell in the spreadsheet to determine whether the output will be true or false. It is possible to observe the output of multiple cells in a single cell by using the AND function.

14. How is cell reference useful in the calculation?

Ans: Considering excel interview questions cell reference is one of the important question. Cell reference is used to prevent writing the data several times for calculation purposes. When you build a formula for a specific function, you must tell Excel where the data is stored. Cell reference is the name given to this site. As a result, whenever a new value is entered into the cell, the cell calculates using the reference cell formula.

15. What do you mean by cells in an Excel sheet?

Ans: A cell is the area that lies at the intersection of a column and a row where the information is to be entered. In a single excel sheet, there are a total of 1,048,576 x 16,384 cells.

16. What are macros?

Ans: Considering excel interview questions macros are very important. By storing routine tasks into macros, Excel allows you to automate them. A macro is an action (or a series of actions) that can be repeated an unlimited number of times. For example, rather than manually calculating sales, profits, and losses for each item at the end of the day, you may construct a macro that will compute these automatically and use it in the future.

17. What do you understand about Excel functions?

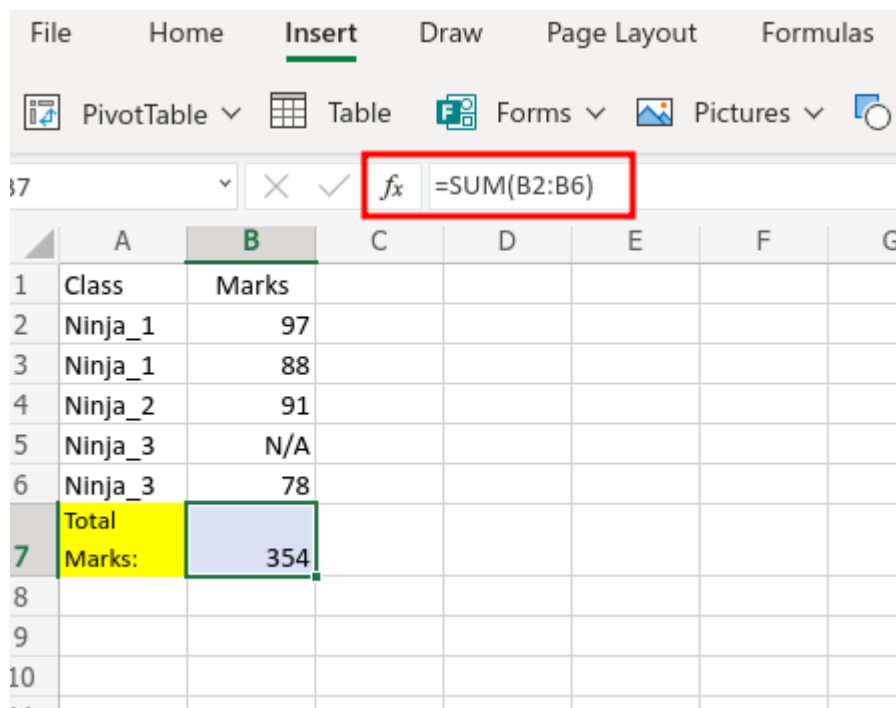
Ans: In Excel, functions are utilized to accomplish certain tasks. Excel offers a number of built-in functions that can be used to calculate the results of various formulas, Hence saving time. Furthermore, these functions make it very simple to perform formulas that would have been difficult to write down manually.

18. Explain SUM and SUMIF functions.

Ans: Questions related to functions have their own place in excel interview questions. Lets discuss SUM and SUMIF function one by one.

SUM: The SUM function calculates the sum of all the values that are passed to it as parameters.

Example:



The screenshot shows the Microsoft Excel interface with the 'Formulas' tab selected. The formula bar displays the formula `=SUM(B2:B6)`, which is highlighted with a red box. Below the formula bar, a table is visible with the following data:

	A	B	C	D	E	F	G
1	Class	Marks					
2	Ninja_1	97					
3	Ninja_1	88					
4	Ninja_2	91					
5	Ninja_3	N/A					
6	Ninja_3	78					
7	Total Marks:	354					
8							
9							
10							

SUM() function Example

SUMIF: This function is used to find the sum of values that met certain conditions.

Example:

<div> File Home Insert Draw Page Layout Formulas </div>							
<div> PivotTable Table Forms Pictures </div>							
B7		fx =SUMIF(A2:A6, "=Ninja_1", B2:B6)					
	A	B	C	D	E	F	G
1	Class	Marks					
2	Ninja_1	97					
3	Ninja_1	88					
4	Ninja_2	91					
5	Ninja_3	N/A					
6	Ninja_3	78					
7	Total Marks (Ninja_1):	185					
8							
9							
10							
11							
12							

Example of SUMIF()

19. How do you calculate the percentage in Excel?

Ans: As we all know, percentages are ratios that are calculated as a fraction of a hundred. Example:

Percentage

20. How can you resize the column?

Ans: A column can be resized in one of two ways:

- To modify the width of a column, drag the right-hand column's boundary until you reach the desired width.
- Pick Format from the main tab, and then select AUTOFIT COLUMN WIDTH from the cell section of Format. To modify the cell size, click this. Example

Excel Interview Questions for Experienced

21. How would you format a cell? What are the options?

Ans: The format cells options can be used to format a cell. There are six different ways to format cells:

- Number
- Alignment
- Font
- Border
- Fill
- Protection

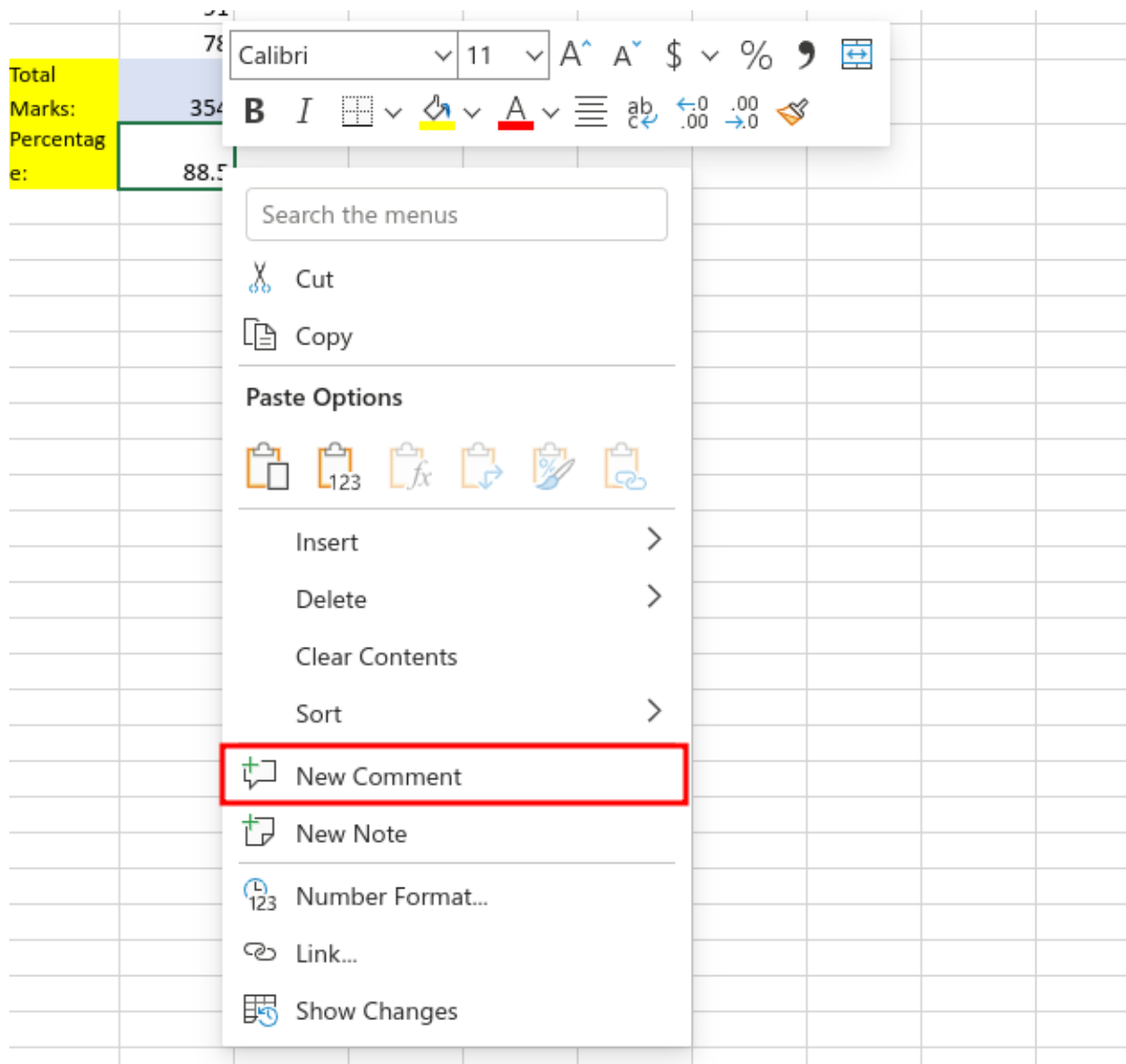
22. What is the use of comment?

Ans: Comments are used for a variety of purposes, including:

1. The purpose of the cells is clarified via comments.
2. Comments are used to explain a formula that has been used in a cell.
3. Comments are intended to leave notes on a cell for other users.

23. How would you add comments to a cell?

Ans: You may add a comment to a cell by right-clicking it and selecting new comment from the menu. Fill in the comment box with your thoughts. A red triangle in the top right corner of a cell shows that the cell has a comment associated with it. To erase a comment from a cell, right-click it and choose delete comment from the menu.



24. What are charts in MS Excel?

Ans: In Excel, charts are used to visualize data in a graphical format. By selecting an item from the Insert tab's Chart group, a user can create any chart type, including column, bar, line, pie, scatter, and so on.

25. Explain what a Spreadsheet is.

Ans: Spreadsheets are cell compositions that help you manage your data. There could be multiple worksheets in a single workbook. At the bottom of the window, you can see all of the sheets as well as the names you gave them.

26. Explain the concept of data tables in Excel and their purpose.

Ans: Data tables are used to perform sensitivity analysis by calculating multiple results based on different input values. They enable users to explore various scenarios quickly. They help observe how changes in inputs affect calculated outputs, such as in financial modeling or what-if analysis.

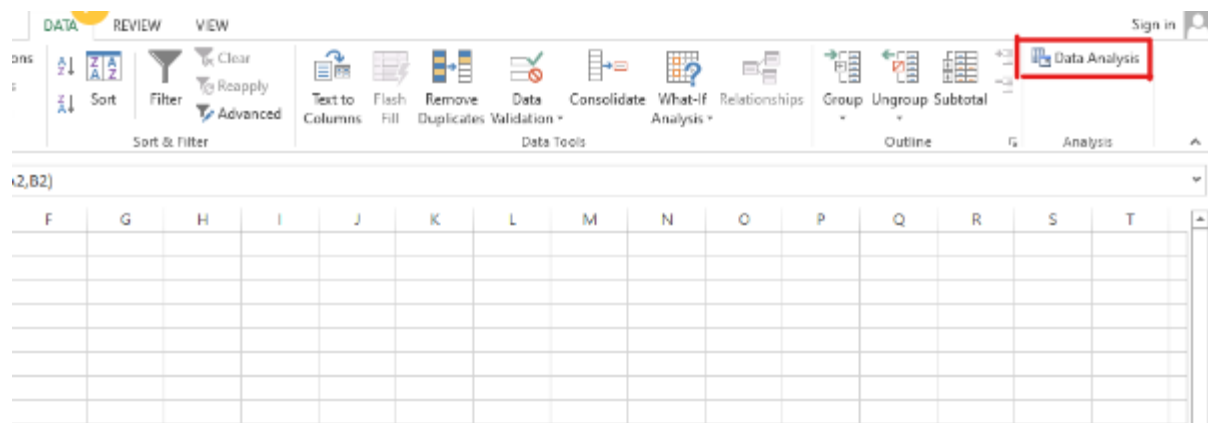
27. How can you use the CONCATENATE or CONCAT functions to merge data in Excel?

Ans: CONCATENATE and CONCAT functions combine text or values from multiple cells into a single cell. CONCATENATE is an older function, while CONCAT is its newer version available in Excel 2016 and later. Both functions are used to create concatenated strings by specifying the cells or values to be combined.

C2	:	X	✓	<i>fx</i>	=CONCATENATE(A2,B2)						
	A	B	C	D	E	F	G				
1											
2	twenty	three	twenty three								
3											
4											
5											
6											

28. How can you use the Data Analysis Toolpak in Excel?

Ans: The Data Analysis Toolpak is an add-in in Excel that provides various advanced data analysis tools. This include regression analysis, histogram generation, moving averages, and more. It enhances Excel's capabilities for statistical analysis and enables users to perform complex data analysis tasks easily.



29. Explain the concept of data tables in Excel and their purpose.

Ans: Data tables are used to perform sensitivity analysis by calculating multiple results based on different input values. They enable users to explore various scenarios quickly and observe how changes in inputs affect calculated outputs, such as in financial modeling or what-if analysis.

30. What is VBA (Visual Basic for Applications) editor in Excel?

Ans: The VBA editor allows customization and automation in Excel using Visual Basic programming. It enables you to create and modify macros, write custom functions, interact with other applications, and perform advanced data manipulation and analysis beyond Excel's built-in capabilities.

Frequently Asked Questions

How do I prepare for an Excel interview?

Review basic and intermediate functions, practice PivotTables and data analysis, learn keyboard shortcuts, and be prepared to use Excel to solve real-world problems to be asked by interviewer when preparing for an Excel interview.

What are the 3 functions of Excel?

The three primary functions of Excel are Data Entry and Storage, Data Analysis, and Reporting and Visualization. These primary functions are used for effective data communication, decision making, sharing information, and data presentation.

What are the basic Excel interview questions for Excel?

The basic interview questions for Excel are:

1. What is Excel used for?
2. How do you insert a new column in Excel?
3. Explain the difference between a relative reference and an absolute reference in Excel.
4. How can you apply conditional formatting in Excel?
5. What is a pivot table, and how is it used in Excel?

What are the 5 basic functions of Excel?

The five basic functions of Excel are:

1. SUM: Adds up a range of cells.
2. AVERAGE: Calculates the average value of a range of cells.
3. COUNT: Counts the number of cells in a range.
4. MAX: Returns the highest value in a range of cells.
5. MIN: Returns the lowest value in a range of cells.