

## Chapter 1 : Microsoft Excel Training Tutorial: Learn in 7 Days

*This Excel Macro Tutorial for Beginners is accompanied by an Excel workbook containing the data and macros I use (including the macro I describe above). You can get immediate free access to this example workbook by subscribing to the Power Spreadsheets Newsletter.*

Macros are code that automate work in a program—they let you add your own tiny features and enhancements to help you accomplish exactly what you need to do, quickly with just a click of a button. In a spreadsheet tool like Excel, macros can be especially powerful. Hidden behind the normal user interface, they are more powerful than standard functions you enter into a cell. These macros make Excel work for you. They replace actions that you do manually—everything from formatting cells, copying values, and calculating totals. So with a few clicks you can quickly replace repetitive tasks. This guide and all examples are written in Excel for Windows, but the principles apply to Excel and newer for both Mac and PC.

### Why Use Excel Macros? Learning how to automate Excel is one of the easiest ways to speed up your work—especially because Excel is used in so many work processes. Say every week you export analytics data from your content management system CMS to create a report about your site. This means you have to clean up empty rows, copy and paste data into the right place, and create your own charts to visualize data and make it print-friendly. All of these steps may take you hours to complete. All it requires is a little bit of time to set up a macro, and then that code can do the work for you automatically every time.

### How to Build Your First Excel Macro

You already know your way around Excel, and are familiar with its grid of cells where you enter your text and functions. The new window that pops up is called the VBA Editor. Its layout may look a bit different from this screenshot, but you can move the windows around to the order you want. Just be sure to keep the Project Explorer pane open so you can easily edit your macros.

### How to Record an Excel Macro

There are two ways to make a macro: Recording a macro is a good way of getting to know the basics of VBA. When you record a macro, you tell Excel to start the recording. Then you perform the tasks you want to be translated into VBA code. Perform the actions in your spreadsheet you want to be turned into a macro. This is your first code! Yours probably look different than mine. Can you guess what my code does? Now, what will happen if I change the True part of the third line to False? The macro would then remove any bold formatting from the selection instead of making it bold. Once you write the code in the VBA Editor, you can run it and let the code work its magic on your spreadsheet. Now, when you click the shape which we just turned into a button, Excel will run the macro without having to open the code each time. By default, Excel spreadsheet files with an .xlsm extension. Go ahead and do that to save your spreadsheet before we start coding. What if your spreadsheet could do that for you? With a macro, it could. This is a sample employee database with the names, departments, and salaries of some employees. Just insert this code into the VBA Editor:

```
Sub Nameofmacro
    Range("Insert where you want to paste").Copy
    Range("D1").PasteSpecial Paste:=xlPasteCopy, xlPasteSpecialOperation:=xlPasteSpecialOperationNone, True
End Sub
```

C Remember when you recorded a macro before? The macro had Sub Nameofmacro and End sub at the top and bottom line of the code. These lines must always be included. Excel makes that easy, too: When you type in "Sub" followed by the macro name in the beginning of the code, the End sub is automatically inserted at the bottom line. Cutting is quite easy and follows the exact same logic as copying. Therefore, you need these lines to paste your cells with VBA: Range "Insert where you want to paste". Copy and paste it into D1: Paste Copying, cutting, and pasting are simple actions that can be done manually without breaking a sweat. But when you copy and paste the same cells several times a day, a button that does it for you can save a bunch of time. Additionally, you can combine copying and pasting in VBA with some other cool code to do even more in your spreadsheet automatically.

### Adding Loops to VBA

I just showed you how to take a simple action copying and pasting and attach it to a button, so you can do it with a mouse click. When you have the code to repeat itself, though, it can do longer and more complex automation tasks in seconds. This type of faulty data structure is not unusual when exporting data from older programs. This can take a lot of time to fix manually, especially if the spreadsheet includes thousands of rows instead of the small sample data in this project file. Enter this code in a module, then look at the explanations below the picture: This line makes sure the loop starts at the top-left cell in the sheet and not accidentally messes the data up by starting somewhere else. This means that the loop will run

times. The number of times the loop should run depends on the actions you want it to do. Use your good sense here. This line recognizes the active cell and tells Excel to move 3 rows down and select that cell, which then becomes the new active cell. If it was every fourth row that was misplaced in our data, instead of every third, we could just replace the 3 with a 4 in this line. This line tells Excel what to do with this newly selected cell. In this case, we want to delete the cell in such manner that the cells to the right of the cell are moved left. That is achieved with this line. If we wanted to do something else with the misplaced rows, this is the place to do it. This line tells Excel that there are no more actions within the loop. In this case, 2 and 5 are the frame of the loop and 3 and 4 is the actions within the loop. When we run this macro, it will result in a neat dataset without any misplaced rows. Adding Logic to VBA Logic is what brings a piece of code to life by making it more than just a machine that can do simple actions and repeat itself. Logic is what makes an Excel-sheet almost human—it lets it make intelligent decisions on its own. Every third row is still misplaced, but now, some of the misplaced rows are placed 2 columns to the right instead of 1 column to the right. How do we take this into account in our macro? We add an IF-statement to the loop! We start in cell A1. Then we go three rows down to cell A4, A7, A10, etc. Every time we go three rows down we check this row to see if the data has been misplaced by 1 or 2 columns. Then move the data in the row either 1 or 2 columns to the left. The only thing we need now is to write what should happen within the loop. This is the final code to copy into your module editor, with each step explained below: This is the first part of the IF-statement. It says that if the cell right of the active cell or Activecell. This something is the exact same action as we did when we created the loop in the first place: This time, we do it two times instead of one, because there are two blank cells in the left side of the row. If the above is not true, and the cell right of the active cell is not blank, then the active cell is blank. Therefore, we only need to delete the active cell and move the active row one cell to the left one time. Automate Excel Without Macros Excel macros have only one problem: App integration tool Zapier can help. It connects the Office for Business edition of Excel to hundreds of other apps—Stripe, Salesforce, Slack, and more—so you can log data to your spreadsheet automatically or start tasks in other apps right from Excel. Say you want to save your Typeform form entries to an Excel spreadsheet. Just create a Zapier account, and click the Make a Zap button in the top right corner. Then, select Typeform in the app picker, and set it to watch your form for new entries. Zapier can watch your Typeform form for new entries Test your Zap, then click Continue to add another step to your Zap. You could also update a row, or search your spreadsheet for a specific row if you wanted. Save and test your Zapier integration, then turn it on. Then every time your Typeform form gets filled out, Zapier will save that data to your Excel spreadsheet. Zapier can add your form data directly to the spreadsheet row you want Here are some great ways to get started automating Excel with Zapier in a few clicks—or build your own Excel integrations to connect your spreadsheets to your favorite apps. Remember to use the macro recorder and Google when you feel you are in over your head. To learn more, here are some extra resources to help you get the most out of Excel Macros: Now Zapier handles it seamlessly.

### Chapter 2 : Learn Excel VBA Programming & Macros (Free Tutorial & Download PDF)

*VBA = Visual Basic for Applications. This is the language used by Excel to record macros. In the video we cover a simple use-case for the macro recorder: how to change your number formats.*

First, let me see if I can answer some of your questions. VBA macros for Excel are stored can be stored in a couple of different places. If the code will be used only for a specific workbook, you store the code in the workbook. If the code is general purpose for example, adding company logo and page numbers to every workbook you store the code in a special file called Personal. This file is automatically created the first time you record a macro and tell it to store the macro in the personal macro workbook. Please note that all macro code in any open workbook on the machine is available to any other open workbook on the machine. You are correct, the Object model reference helps you explore all of the different objects that are available to your VBA code. At the top of the model is the Excel. Underneath that is a hierarchy of objects. For example, each Excel application hosts 0 to many workbooks. Each workbook has worksheets, each worksheet has columns, rows, etc. You can use the Object Browser available from the View menu in the VBA development environment to search through the hierarchy of available objects and learn what you can do with them. You might have to "enable" the developer tab in program options to see it. One of the other things you should try is to record a simple macro in Excel. I often have my students record a macro that changes the background color of a column, then changes the font size and color. Then, go into the VBA editor and take a look at the code you recorded. Since you know what you recorded, you can often make sense of the code. VBA is very English like in nature. I recommend that when you read it, you start from the end of the statement and work your way left. For example, consider this code: Once you get used to reading the code, then the links on Google or other search engines become more helpful. You can use them to learn how to make decisions in code, store values in memory temporarily, loop through all rows automatically to process data, etc. I am a Microsoft Certified Trainer. One of my specialties is teaching VBA programming. You might want to consider an introductory VBA course many training centers offer 1 or 3 day courses. If you are comfortable learning by reading and working through exercises, you might want to consider these titles: I can recommend others based upon your learning style.

### Chapter 3 : How to Create Your First Macro Button in Excel for Beginners | Free Microsoft Excel Tutorials

*VBA is the acronym for Visual Basic for Applications. It is a programming language that Excel uses to record your steps as you perform routine tasks. You do not need to be a programmer or a very technical person to enjoy the benefits of macros in Excel.*

What is a macro? A macro is a piece of programming code that runs in Excel environment and helps automate routine tasks. Some of the customers pay through the bank and at the end of the day, you are required to download the data from the bank and format it in a format that meets your business requirements. You can import the data into Excel and format. The following day you will be required to perform the same ritual. It will soon become boring and tedious. Macros solve such problems by automating such routine tasks. You can use a macro to record the steps of Importing the data Formatting it to meet your business reporting requirements. It is a programming language that Excel uses to record your steps as you perform routine tasks. You do not need to be a programmer or a very technical person to enjoy the benefits of macros in Excel. Excel has features that automatically generated the source code for you. Read the article on Vba for more details. Macro Basics Macros are one of the developer features. By default, the tab for developers is not displayed in excel. You will need to display it via customize report Macros can be used to compromise your system by attackers. By default, they are disabled in excel. Always fill in the description of the macro when creating one. This will help you and others to understand what the macro is doing. Step by step example of recording macros in Excel We will work with the scenario described in the importance of macros excel. We will work with the following CSV file. You can download the above file here We will create a macro enabled template that will import the above data and format it to meet our business reporting requirements. Enable the developer option as shown below and pin it into your main ribbon in Excel. Create a folder in drive C named Bank Receipts Paste the receipts. Step two will be there by default Enter the description as shown in the above diagram Click on "OK" tab Put the cursor in cell A1 Click on the DATA tab Click on From Text button on the Get External data ribbon bar You will get the following dialogue window Go to the local drive where you have stored the CSV file Select the CSV file You will get the following wizard Click on Next button after following the above steps Follow the above steps and click on next button Click on Finish button Your workbook should now look as follows Make the columns bold, add the grand total and use the SUM function to get the total amount. Now that we have finished our routine work, we can click on stop recording macro button as shown in the image below Before we save our work book, we will need to delete the imported data. We will do this to create a template that we will be copying every time we have new receipts and want to run the ImportBankReceipts macro. Highlight all the imported data Right click on the highlighted data Click on Delete Click on save as button Save the workbook in a macro enabled format as shown below Make a copy of the newly saved template Open it.

## Chapter 4 : Video: Work with macros - Excel

*1 Create a Macro: With Excel VBA you can automate tasks in Excel by writing so called macros. In this chapter, learn how to create a simple macro. 2 MsgBox: The MsgBox is a dialog box in Excel VBA you can use to inform the users of your program.*

These font encoder tools can be used to format the data-to-encode into a special string that will display an accurate barcode when the appropriate font is applied to it. These Office Macros consist of pure VBA modules with customizable code, functions and other options that allow for dynamic and variable data barcode generation. Consequently, this also means that the implementation may be more complicated for the average user. These font encoder tools format data into a text string that will display a readable barcode when the appropriate IDAutomation font is applied to it. This tool is not compatible with Office for Mac because that version does not have VBA capability. Excel and above: Add Developer tab, if not already there. Step-by-Step Instructions Excel Click on Popular at the top of the list on the left and then click Show Developer Tab in the Ribbon and save. Office for Mac does not have an import feature in the version; therefore, users must copy and paste the necessary RTF file, which are available by request after purchase of a Universal Barcode Font license, manually by going to Tools - Macros - Visual Basic Editor. Once the editor window is open, go to Insert - Module and paste the contents of the RTF file for the corresponding type barcode being used. Excel for Mac Office for Mac has included an import feature in their version. Step-by-Step Instructions Very Important: Regardless of the Excel version, after importing the. The Visual Basic Editor feature was removed from Excel for Mac , and thus this font tool cannot be used in that environment. Within the editor, choose View - Project Explorer. To use the functions in another Access database, the module must be copied to the other database, or the module must be exported from the sample database and imported into the other database. Copy the Module to Another Database: Choose the Modules folder. Save the module to an external file. Choose the database to copy the module to and click OK. This option is not available in all versions of Access. Access and above: Select the Database Tools tab - Visual Basic. Access - If uncertain, consult the Excel Barcode Integration Guide for a variety of scenarios and product suggestions. After downloading the file and extracting its contents, open the sample Excel spreadsheet provided. This spreadsheet contains some examples for various barcode types. Use the sample spreadsheet as a reference for creating barcodes if help is needed, or contact IDAutomation for additional support. Your web site is well designed and has a wealth of information. We have been able to implement barcoded data collection and reporting. The barcode font has enabled us to streamline our data collection process significantly. It was extremely simple to set up. We use the Microsoft Excel Macro to create internal forms that can easily be scanned throughout our manufacturing process. If prompted when the document re-opens, choose Enable Macros. Office and above applications require the Macros to run from a trusted location. Excel and require a medium security setting to run Macros. Open Excel and set the security level to medium by choosing Tools - Macro - Security. Data may be pasted into these files and used if the Macros are not modified. If a different spreadsheet is used other than the sample provided, the Macros must be imported into the spreadsheet. Create a column in the spreadsheet for the barcode. Size the column to make sure it is wide enough to contain the entire barcode. Format the column so that any text appearing in it will be centered. This is necessary to create the white space often called the quiet zone before and after the barcode. Enter the formula in this cell that will format the data to the barcode font. For all 2D fonts, refer to the documentation within that particular package. Examine the spreadsheet to make sure the data is being properly formatted to the barcode font. Strange characters may append to the beginning and ending of the data from the fields, but this is normal. In some cases, the data may need to be reformatted and may appear scrambled. This is normal for Code and Interleaved 2 of 5 barcode fonts when numbers need to be compressed within the barcode. After verifying that the text in the cell has been formatted correctly, select the appropriate font and set the point size to Ensure that the column is wide enough to contain the entire barcode with some white space before and after the barcode. Scan the printed barcodes with a handheld USB barcode scanner to verify the correct data is encoded. Symbology Specific Tutorials for Excel:

## Chapter 5 : Visual Basic VBA Barcode Macro & Functions Tutorial

*How to Create Your First Macro Button in Excel - Beginners Tutorial. May 25, Top Excel Formulas & Function Examples To Get Better At Microsoft Excel.*

Start free trial What is VBA? VBA is a programming language that can automate tasks within Excel using macros. You can calculate, move and manipulate data using this language. If you already have some experience creating macros, this article will show you how to take your skills to the next level with the Excel VBA advanced filter. What is advanced filtering? VBA advanced filtering is used for more complex filtering needs that the AutoFilter in Excel cannot complete. You can filter out unique items, extract specific words or dates and even copy them to another document or sheet. In this article, we will be using VBA to control advanced filtering but first, we need to show you how to build and setup your document so it is ready for VBA advanced filtering. How to set up advanced filtering Here are the steps for setting up the data ready for advanced filtering. I will be using a blue table for the Data Range, and green for the Criteria Range, as shown in the screenshots below. You can set one or multiple criteria. To set this up: The same rule applies here as the criteria range; the headers need to be exactly the same Note: Apply the advanced filter This is to set the area you want to copy the filtered items to. When copying to another location Excel will clear any data already stored in your extract location when the filter is applied Click OK Filtering unique items There is an option when filtering to only return unique items. This will return only 1 record that meets each of the criteria you have set. First, we need to access the Visual Basic screen in Excel by default, this is turned off. To turn it on go to: There are a few kinds of Macros we will cover: The "Database" would be replaced with the range area of our data The "Criteria" would be replaced by our Criteria range Range "Database". F3" End Sub We now need to add a button: Another way to trigger a VBA Macro is to get Excel to automatically trigger whenever a sheet is updated - In other words when you add, update or change a cell. F3" Is Nothing Or Target. We need to change Action: This will filter the data from Sheet 1 into Sheet 1 in the range A1: D1" End Sub What we have gone through so far just covers the basics of filtering, but there is much more filtering is capable of. Advanced filtering with multiple criteria Currently, the criteria range can only handle AND statements meaning it would need to meet all of the criteria to display after filtering. If I wanted to do an OR statement i. First I would expand my row at the bottom to allow for more statements Expand both Macros to allow for the extra row Note: Make sure when moving or adding new rows that the Macros are still looking at the correct range. If we wanted to remove a column, for example, we would change this code: D1" To this code: D1" Notice I changed both the Filter area and the range Criteria. This will not work unless something is contained within both rows or all of the rows if you have more. So we will need to add some code to find which is the bottom row: Next i Range "C6: We would use a symbol within the search criteria. In summary So, what have we learned? This is not just limited to advanced filtering as it can be used with other Excel functions The different triggers for VBA in Excel: Learn from the pros with our step-by-step guide on how to build Excel UDF s. Step up your Excel game Download our print-ready shortcut cheatsheet for Excel. Enter your email address Loved this? Subscribe, and join , others. Get our latest content before everyone else. Your email address Anthony Jackson Ant is an Excel whiz who has been building automated systems in Excel for over 10 years. He is a new dad to a 1-year-old girl and he enjoys playing the guitar in his spare time not that he gets much of it anymore!

## Chapter 6 : Best Excel Macros & VBA Online Training Courses - November Update

*The macro recorder is the easiest way to create a new macro in Excel. A quick note: Macros aren't available in Office on a Windows RT PC. To see what version of Office you are running, click FILE and then click Account.*

October 8, by Kasia Mikoluk Macros are little programs that run within Excel and help automate common repetitive tasks. Using macros, you can save hours and boost productivity manifold. In this blog post, we will learn how to create an ultra-simple macro in Excel to introduce you to the concept. For a more detailed overview of advanced Excel functions, including creating complicated macros, try the comprehensive Excel training course for beginners and intermediate users. What is a Macro? A macro can be defined as the recording of a series of tasks. When used right, macros can save you hours by automating simple, repetitive tasks. This is a version of Visual Basic a prominent Microsoft programming language developed specifically for use in Office-like applications. Creating simple macros is fairly easy. Complicated macros require a bit more work. You can learn more about these in this advanced Excel course. For this tutorial, we will create a very simple macro to get you up to speed with Excel programming and automation. Activate the Developer Toolbar To write macros, you will need access to the Developer toolbar in the top ribbon. This is hidden by default. You should now see the Developer toolbar in the ribbon. Enable Macros Macros are disabled by default in Excel. This is to protect you from malicious macros running automatically in downloaded Excel files. To use macros, you will have to first enable them from the Trust Center. You can now start using macros in your Excel spreadsheets. Prepare the Spreadsheet In this tutorial, we will create a very simple macro to change the color, size and boldness of text. In your spreadsheet, type in some text in any of the cells. We will later record a macro to change the formatting of this text. Now that our spreadsheet is ready, we can start creating the macro. Type in whatever you like over here. It helps to be descriptive with your macro titles. You might end up using dozens of macros in a large spreadsheet. Being able to quickly find individual macros by name will save you hours of frustration later. Two important considerations here: The shortcut key gives you quick access to the macro. Using a custom shortcut is highly recommended when you are using macros to save time, after all. In this drop down menu, you can decide where to save the macro. Macros stored in this workbook are available across all your workbooks. Think of it as a central repository for every macro that you create. The actual macro workbook file itself will be hidden in the Windows AppData folder, but it will load up automatically when you start Excel, giving you complete access to all macros. Not sure how macros work? Your macro is now being recorded. Select the cell where you entered your text. You have now successfully recorded an Excel macro! Add a few more blocks of text to your spreadsheet, one cell at a time. You might have to change the default formatting back to black font, 11 point font size and normal text. The formatting will immediately change to 18 pt. You can apply this to each cell at a time, or select multiple cells together. The formatting changes that would otherwise take you multiple clicks now take just one keystroke. This is one of the most basic macros you can create. As you can imagine, complex macros can be created to perform very complicated tasks. You can learn more about creating such macros with Excel VBA programming in this Excel training course for advanced topics. Was this tutorial helpful? Share them with us in the comments below.

## Chapter 7 : The Best Way to Write a Macro in Excel - wikiHow

*How to Record an Excel Macro. There are two ways to make a macro: code it or record it. The main focus of this article is on the former, but recording a macro is so simple and handy, it's worth exploring too.*

If you follow the above tutorials step by step, you will be able to make any complicated project using Excel VBA. Just you have to do a little practice. This channel is run by Daniel Strong. He has enriched his channel with a huge number of video tutorials on Excel VBA. Whatever your problem is, you will get a solution with this YouTube channel. It is true that there are plenty of free videos are there on YouTube on Excel VBA, but what you need is a true guide who will start from basic, keep you engaged and on track with lessons, quizzes, and other essential materials. What are you going to get from this course? I had a plan to make a course on Excel VBA. Mark has been using Excel since version 1. And here are some reviews in his course. Started writing a VBA code and did forget the syntax of a constructor? Just go to Google and convert your problems in some phrases and hit Enter. Millions of results will appear to you immediately. Searching in a book for some problems? It will take time. Go to the Index page, then count a, b, c, d, find out your relevant topic, go to that page, and get an idea of your findings. A long-term process really and there is no guarantee that you will find your problem topic in your book. Then why every expert says that you need a book on your topic? My advice is same to you. You need one or two books in Excel VBA. It might be in PDF or it can be a hardcover book preferable. When you will enroll in an online course on Excel VBA or on any topic , it is true that you will learn almost all the topics within the shortest possible of time. But a video course can be compared with a regular classroom where your instructor just gives you the general view of the topics. You then go home, open the book and read the topics that you have learned in your classes and do some practice problems. So, still, at this age of quick information, a book is an inevitable asset at your table. Here, I will give you a list of total 3 books that you can consider buying. These books are really helpful and the readers have shown their high gratitude to the authors of these books through reviews. He is known as Excel GUY and if this is your first day of introduction with Microsoft Excel, you may have heard his name.

## Chapter 8 : Macros | Free Microsoft Excel Tutorials

*Categories: Excel®, Macros Tags: Excel Macro Tutorial for beginners To follow using our example, download [www.nxgvision.com](http://www.nxgvision.com) Once you get comfortable navigating Excel, it won't be long before you start to hear about this wondrous feature called a "Macro" that can leap tall projects with a single keystroke and make boring tasks go by.*

## Chapter 9 : Excel VBA Tutorials for | Beginners | Intermediate | Advanced Users

*Excel Macros i About the Tutorial An Excel macro is an action or a set of actions that you can record, give a name, save and run as many times as you want and whenever you want.*