EXCEL ASSIGNMENT 18

1. ***What are comments and what is the importance if commenting in any code?***

***Ans.*** Commenting involves placing Human Readable Descriptions inside of computer programs detailing what the Code is doing. Proper use of commenting can make code maintenance much easier, as well as helping make finding bugs faster. Further, commenting is very important when writing functions that other people will use.

“Programs must be written for people to read, and only incidentally for machines to execute.” Comments are employed to notify, warn, and remind others that didn't write the code [and your future self] of important things that the code is doing.

* Saves time
* Provide a pseudo-code to help you and,more importantly , your future self, understand what the heck is going on.
* Keep track of what needs to be done.
* Comment out alternative methods that can be used

1. ***What is Call Statement and when do you use this statement?***

***Ans.*** the CALL statement transfers control from one object program to another within the run unit.

The program containing the CALL statement is the calling program; the program identified in the CALL statement is the called subprogram. Called programs can contain CALL statements; however, only programs defined with the RECURSIVE clause can execute a CALL statement that directly or indirectly calls itself.

You are not required to use the **Call** keyword when calling a procedure. However, if you use the **Call** keyword to call a procedure that requires arguments, argumentlist must be enclosed in parentheses. If you omit the **Call** keyword, you also must omit the parentheses around argumentlist. If you use either **Call** syntax to call any intrinsic or user-defined function, the function's return value is discarded.

To pass a whole array to a procedure, use the array name followed by empty parentheses.

1. ***How do you compile a code in VBA? What are some of the problem that you might face when you don’t compile a code?***

***Ans.*** Compile errors refer to a wider group of VBA errors, which include syntax errors. Compile errors also identify problems with your code when considered as a whole. The syntax of each individual line may be correct, but when put together, the lines of your code don’t make sense. Compile errors are highlighted when you compile or run your code.

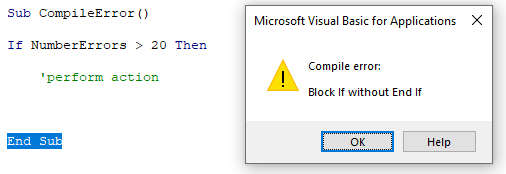
#### How to Identify a Compile Error

When you run your VBA code, compile errors will be presented in a VBA dialog box as per the examples below.

Alternatively, if your project is long or complex and involves multiple routines, it can be helpful to compile your code before you run it. It prevents situations where half of your code runs successfully and then an error pops up. You can compile your VBA code by clicking Debug Menu →  Compile VBA Project.

**Example 1**

A compile error for a missing “End if” part of an IF statement. Every individual line in the code is correct, but together, they don’t represent a complete IF statement.

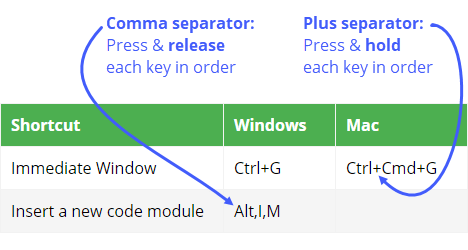


1. ***What are hot keys in VBA? How can you create your own hot keys?***

# ***Ans.*** VBA Keyboard Shortcuts List

This page contains a list of my **top 25 shortcuts for VBA and the VB Editor**, including shortcuts for the **Windows**, and **Mac** versions of Excel/Office.  You can download a **printable PDF version** of the list below.

## How to Press the Shortcut Keys

[](https://www.excelcampus.com/wp-content/uploads/2021/04/VBA-Keyboard-Shortcut-Key-Sequence-Guide.jpg)

#### Click here to learn more about pressing the shortcuts and using a Laptop keyboard

## How to Use & Search This Page

The shortcuts are divided into different sections based categories of where the shortcut is used (cells, worksheets, workbooks, etc.).  Some sections have additional sub sections based on different actions/tasks (navigating, writing formulas, formatting, etc.).

The Table of Contents below can be used to navigate to each section of the page.  You can also use your browser's Find box (found in the settings of Chrome and Safari) to find a specific shortcut you are looking for.  Please [leave a comment](https://www.excelcampus.com/vba-shortcuts/#comments) at the bottom of the page with any questions or suggestions.

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##### Download the PDF Version

Click the link below to get a **free printable PDF** version of this page with over 25 VBA Shortcuts.

[VBA Keyboard Shortcuts List.pdf](https://www.excelcampus.com/vba-shortcuts/#tve-jump-178fad1e6df) (338 KB)

## Running Macros & Code

These shortcuts help when you are running your macros or stepping through each line of code to test and debug.

|  |  |  |
| --- | --- | --- |
| **Shortcut** | **Windows** | **Mac** |
| Jump between Excel and the VB Editor Window | Alt+F11 | Opt+F11 or Fn+Opt+F11 |
| Run Macro/Procedure | F5 | F5 |
| Step Through Each Line of Code | F8 | Cmd+Shift+i |
| Run to Cursor | Ctrl+F8 |  |
| Add a Break Point | F9 |  |
| Reset/stop code | Alt,R,R |  |
| Compile VBA Project | Alt,D,L |  |

## Navigating Through Code Modules & Procedures

These shortcuts will help you jump between procedures (macros) and quickly navigate through code module windows.

|  |  |  |
| --- | --- | --- |
| **Shortcut** | **Windows** | **Mac** |
| Flip through open code windows | Ctrl+Tab | Ctrl+Tab |
| Flip backwards through open code windows | Ctrl+Shift+Tab | Ctrl+Shift+Tab |
| Jump to Definition (procedure name that text cursor is in) | Shift+F2 |  |
| Jump to last position | Ctrl+Shift+F2 |  |
| Jump to previous/next procedure | Ctrl+Page Up/Down | Fn+Ctrl+Cmd+↑ or ↓ |
| Select the entire procedure | Ctrl+Shift+Page Down | Fn+Ctrl+Cmd+Shift+↓ |
| Find Window | Ctrl+F | Cmd+F |
| Replace Window | Ctrl+H | Cmd+Shift+H |

## Writing Code

These shortcuts help save time when writing code with tasks like autocompleting words, deleting lines, showing the Intellisense menu, and more.

|  |  |  |
| --- | --- | --- |
| **Shortcut** | **Windows** | **Mac** |
| Complete Word | Ctrl+Space | Ctrl+Space |
| Delete entire line | Ctrl+Y | Cmd+Y |
| Jumps to the beginning or end of a word | Ctrl+← or → | Cmd+←or → |
| Selects the entire word | Ctrl+Shift+→ or ← | Cmd+Shift+→ or ← |
| List properties/methods (Intellisense drop-down list) | Ctrl+J | Cmd+J |
| Quick Info | Ctrl+i | Cmd+i |

## VB Editor Windows

Open the windows and task panes that are commonly used within the VB Editor.

|  |  |  |
| --- | --- | --- |
| **Shortcut** | **Windows** | **Mac** |
| Immediate Window | Ctrl+G | Ctrl+Cmd+G |
| Project Explorer Window | Ctrl+R | Ctrl+Cmd+R |
| Properties Window | F4 |  |
| Insert a new code module | Alt,I,M |  |
| Insert a new userform | Alt,I,U |  |
| View userform code | F7 |  |
| Object Browser | F2 | Ctrl+Cmd+B |

1. ***Create a macro and shortcut key to find the square root of the following numbers 665, 89, 72, 86, 48, 32, 569, 7521***

***Ans.*** In VBA, we have a built-in function called “SQR.” This function returns the square root for the given number provided in the input. The Square Root function requires only one argument for its function: Number.

The [**SQRT is a square root function**](https://www.wallstreetmojo.com/square-root-in-excel/) in both Excel and VBA. The method to use this function is SQR(Number). One may use it to calculate the square root of a given number in Excel. However, the nomenclature is different. For example, one may write as SQRT compared to SQR in VBA.

SHORTCUT KEY

Hold the ALT key and then press the number keys 2,5, and 1 on the numeric keypad. Now when you leave the keys, the square root symbol will be inserted.

|  |  |  |
| --- | --- | --- |
| ***square root*** |  |  |
|  |  |  |
| 665 | = | 25.79 |
| 89 | = | 9.43 |
| 72 | = | 8.49 |
| 86 | = | 9.27 |
| 48 | = | 6.93 |
| 32 | = | 5.66 |
| 569 | = | 23.85 |
| 7521 | = | 86.72 |

***6. What are the shortcut keys used to***

***a. Run the code*  =** ctrl + Alt + N

***b. Step into the code*** = f11

***c. Step out of code*** = shift + f11

***d. Reset the code*** = ctrl + shift + P