

## Excel Assignment 17

1. What are modules in VBA and describe in detail the importance of creating a module?

Ans: VBA module is a “.bcf” extension file that holds the code in the visual basic editor. Each module has its own code window where you can write. You can insert a new module, delete, backup, and import it. In simple words, it's like a text file that you open in the notepad.

2. What is Class Module and what is the difference between a Class Module and a Module?

Ans: Class modules are a special type of module that allow you to create your own customized objects.

You can define the methods and properties for them and even write event handlers.

These are similar to form modules, except they have no visible user interface.

A class module can contain declarations, properties, methods and events.

The main difference between classes and modules is that classes can be instantiated as objects while standard modules cannot. Because there is only one copy of a standard module's data, when one part of your program changes a public variable in a standard module, any other part of the program gets the same value if it then reads that variable. In contrast, object data exists separately for each instantiated object. Another difference is that unlike standard modules, classes can implement interfaces.

3. What are Procedures? What is a Function Procedure and a Property Procedure?

Ans: A Function procedure is a series of Visual Basic statements enclosed by the Function and End Function statements. The Function procedure performs a task and then returns control to the calling code. When it returns control, it also returns a value to the calling code. A property procedure is a series of Visual Basic statements that manipulate a custom property on a module, class, or structure. Property procedures are also known as *property accessors*.

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5. What is a sub procedure and what are all the parts of a sub procedure

and when are they used?

Ans: A **Sub** procedure is a series of Visual Basic statements enclosed by the **Sub** and **End Sub** statements that performs actions but doesn't return a value. A **Sub** procedure can take arguments, such as constants, variables, or expressions that are passed by a calling procedure

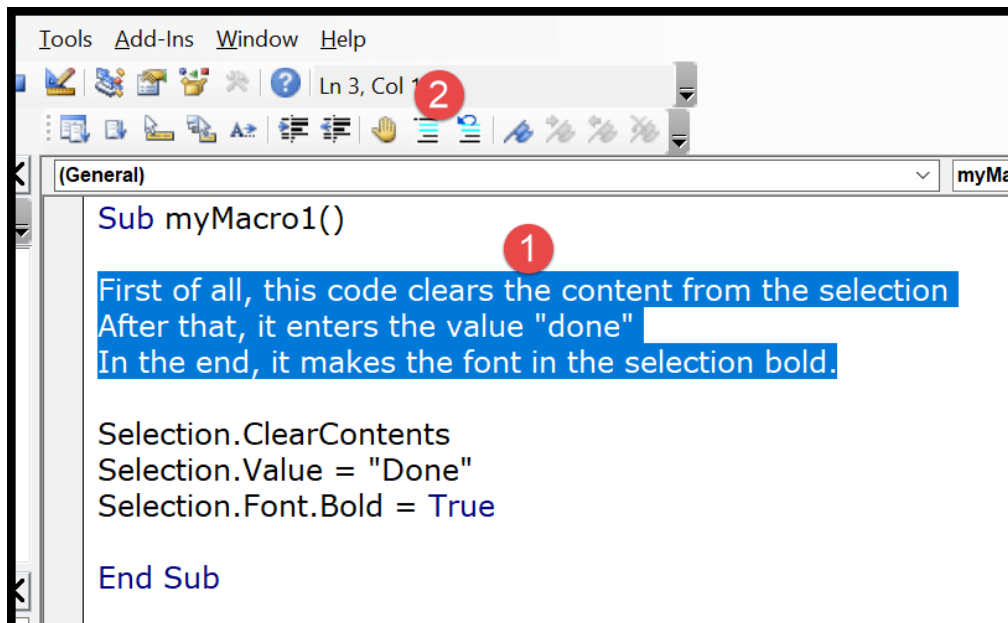
A Sub procedure is a series of Visual Basic statements enclosed by the Sub and End Sub statements. The Sub procedure performs a task and then returns control to the calling code, but it does not return a value to the calling code.

Each time the procedure is called, its statements are executed, starting with the first executable statement after the Sub statement and ending with the first End Sub, Exit Sub, or Return statement encountered.

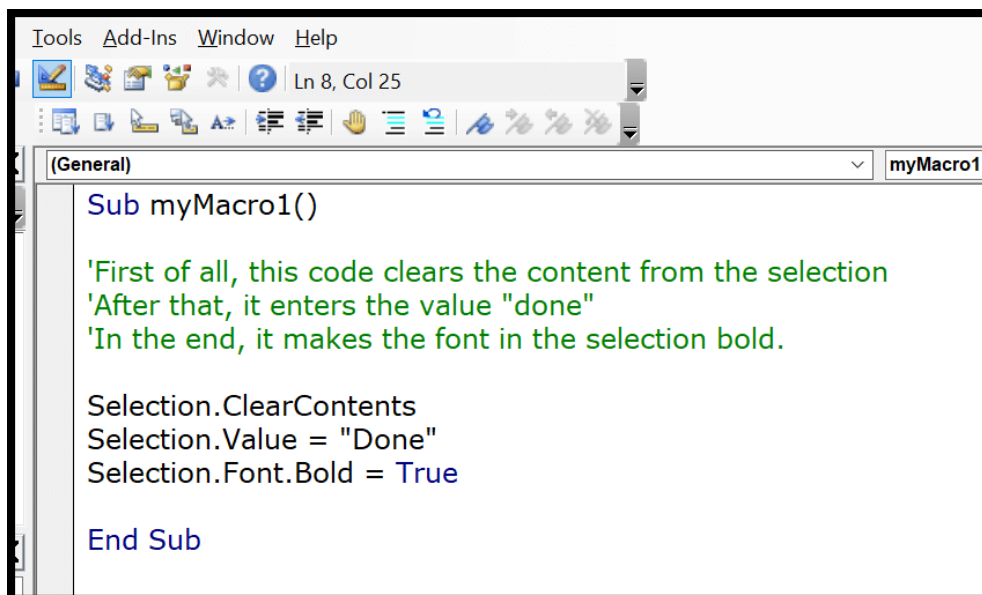
6. How do you add comments in a VBA code? How do you add multiple lines of comments in a VBA code?

Ans: A VBA COMMENT is a green line of text that helps you to describe the written code. In simple words, a comment is a line of text which is not a code and VBA ignores it while executing the code. It's a good practice (I'd say one of the best) to add comments in your VBA codes.

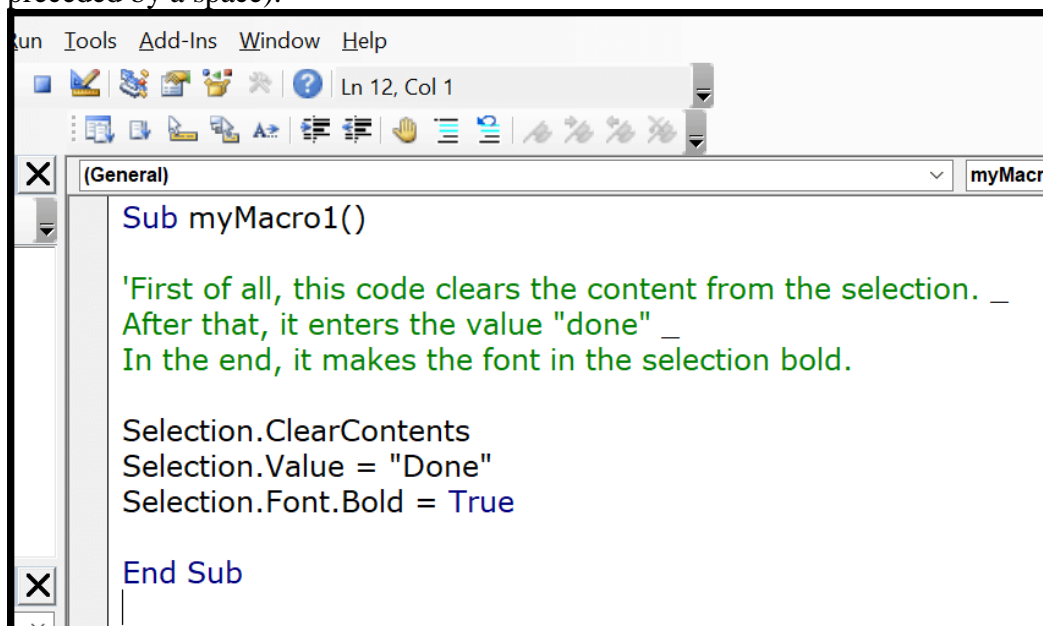
The easiest way is to select all the lines and then use the comment button from the toolbar or you can also add an APOSTROPHE at the starting of each line.



The moment you click the comment button it will convert all the lines into a multi-line comment block.



**Update:** There's one thing that I have discovered recently if you have a block of comment line (continuous), you can use a line continuation character (an underscore must be immediately preceded by a space).



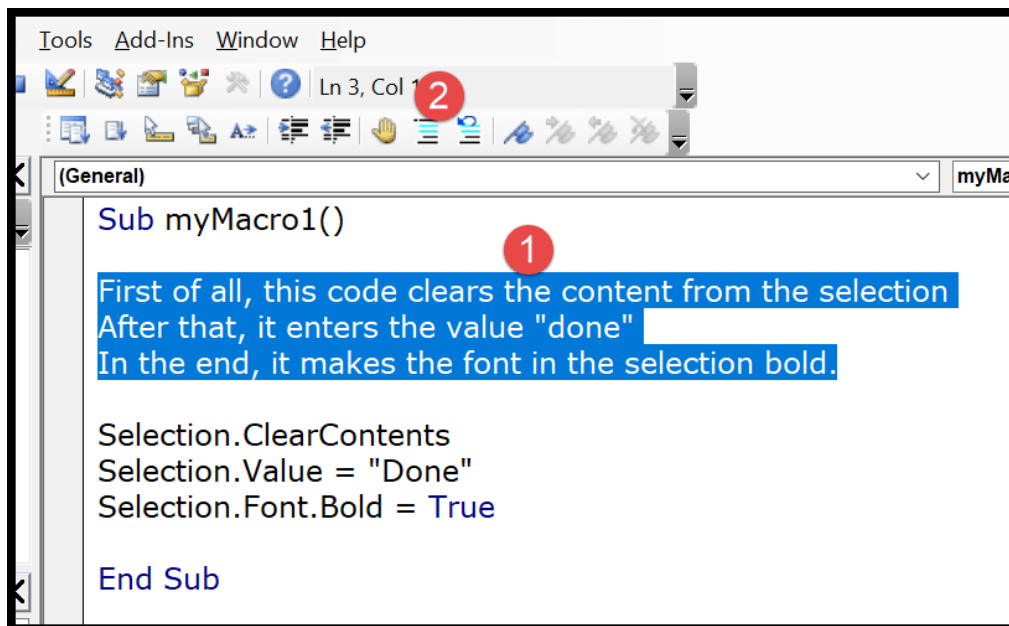
In the above example, I have used an apostrophe only at the start of the first line of the comment, the rest two-line don't have an apostrophe but I have used line continuation character to give a line break at the end of the first line and the second line.

7. How do you add comments in a VBA code? How do you add multiple lines of comments in a VBA code?

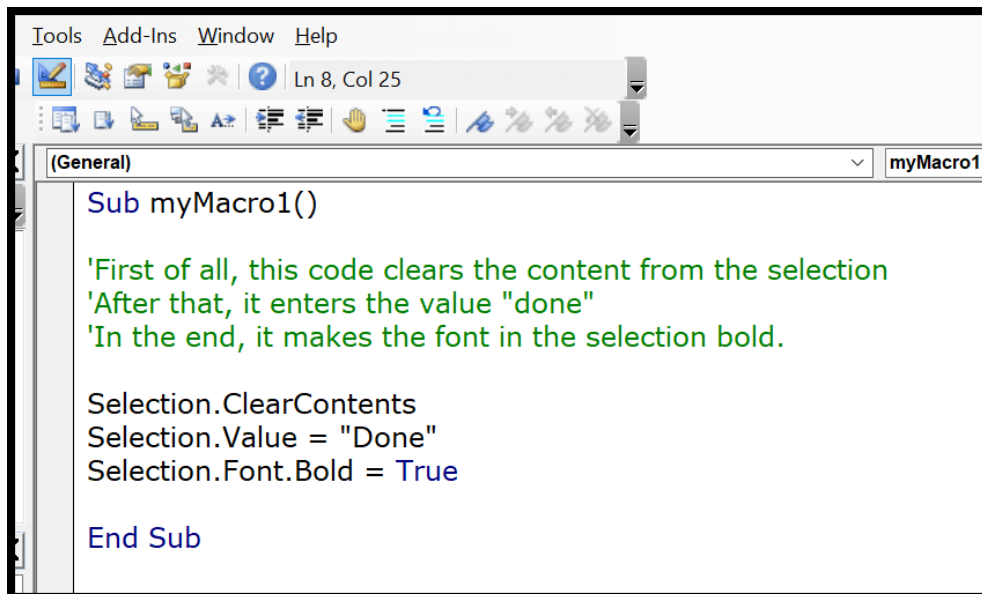
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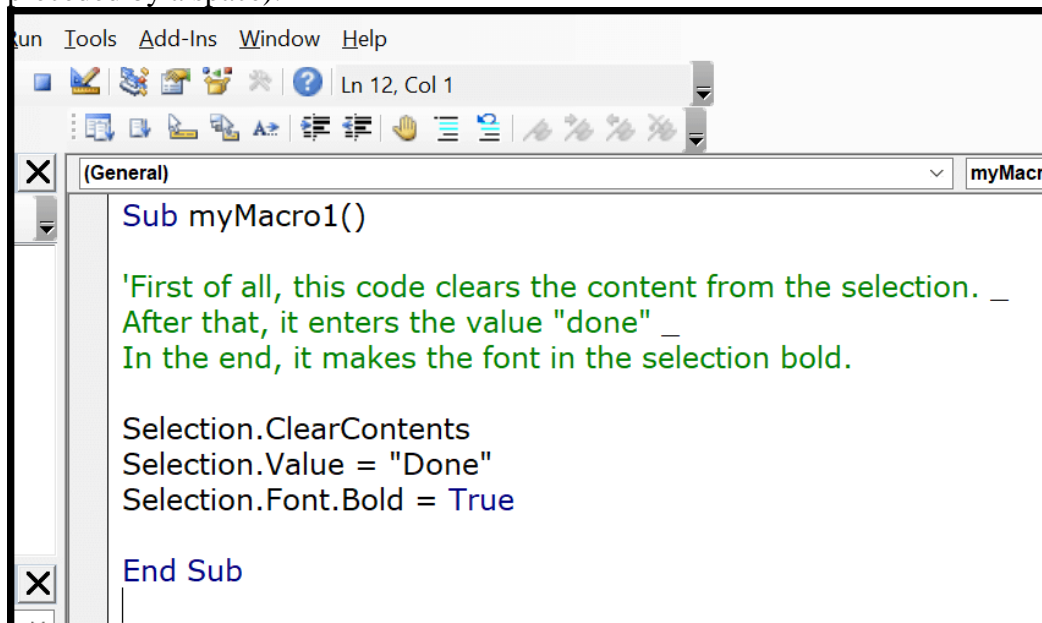
```
Tools Add-Ins Window Help
Ln 8, Col 25
(myMacro1)
Sub myMacro1()

'First of all, this code clears the content from the selection
'After that, it enters the value "done"
'In the end, it makes the font in the selection bold.

Selection.ClearContents
Selection.Value = "Done"
Selection.Font.Bold = True

End Sub
```

**Update:** There's one thing that I have discovered recently if you have a block of comment line (continuous), you can use a line continuation character (an underscore must be immediately preceded by a space).



```
Run Tools Add-Ins Window Help
Ln 12, Col 1
(myMacro1)
Sub myMacro1()

'First of all, this code clears the content from the selection. _
After that, it enters the value "done" _
In the end, it makes the font in the selection bold.

Selection.ClearContents
Selection.Value = "Done"
Selection.Font.Bold = True

End Sub
```

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