

Excel Assignment - 17

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

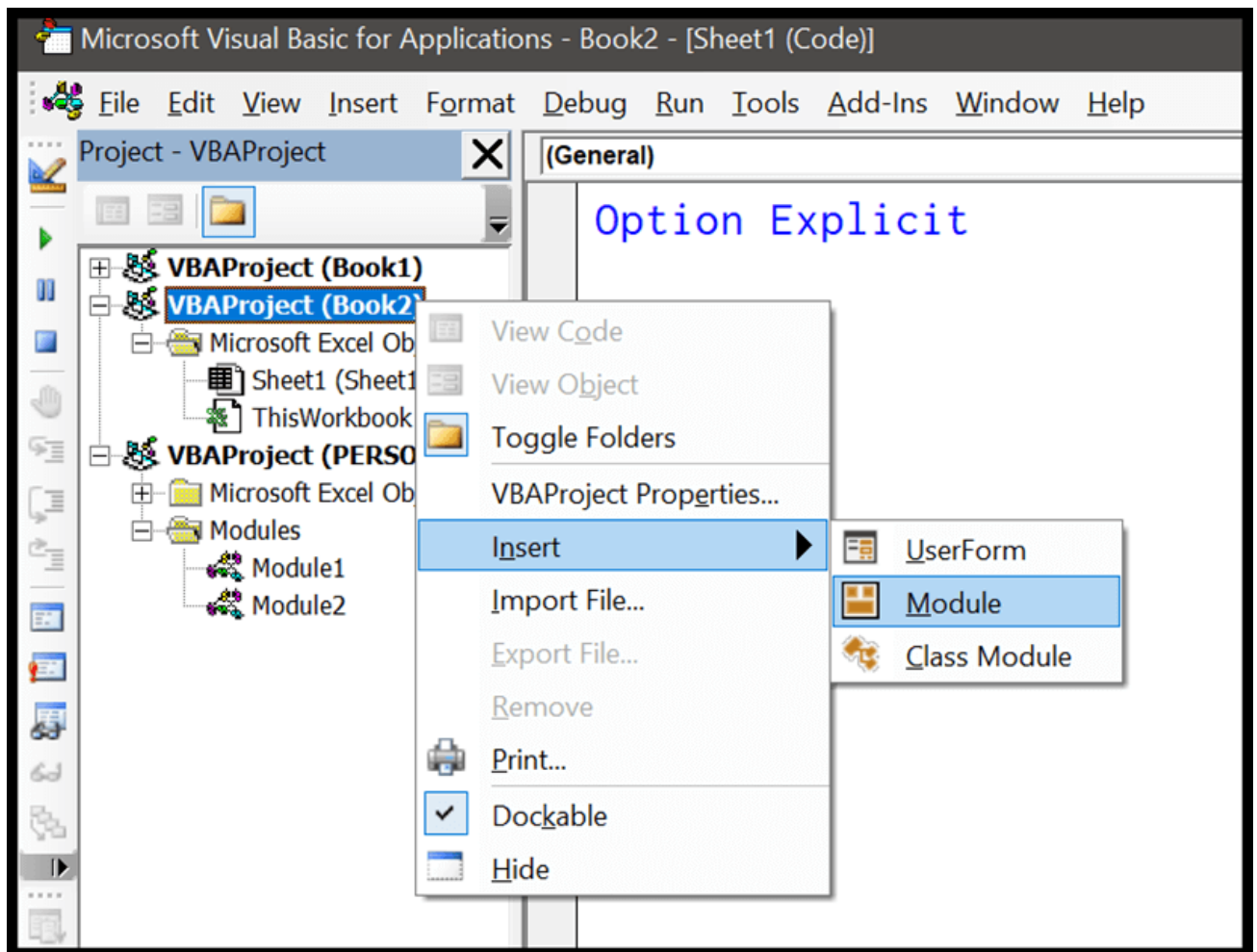
Ans- VBA modules are containers for storing and organizing code. They are used to write and store custom procedures ,functions and Macros.

Importance of Creating Module

a)Code organization- through structured way using VBA

b)Reusability of codes and functions

c) Encapsulation process of hiding of the implementation details of code module



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

Ans- A class module in VBA is a container that allows you to create custom objects or classes with their own properties, methods, and events. Class modules enable you to define the behaviour and characteristics of a specific object type and encapsulate related code within the module.

Class Module vs Module

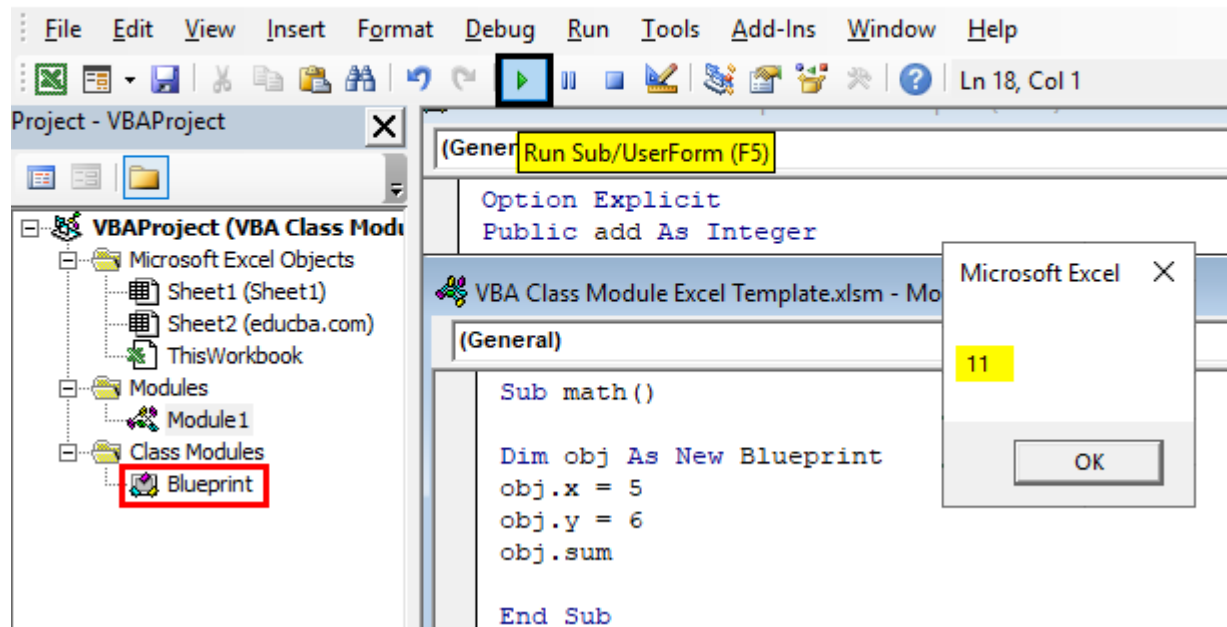
a)Object-Oriented Programming- this feature is available in Class module

b)Properties and Methods- allows to define properties that define properties that represent attributes of an object

c)Events- class module support creation of event procedure

d)Instance Creation- class modules are used to create instances of defined class.

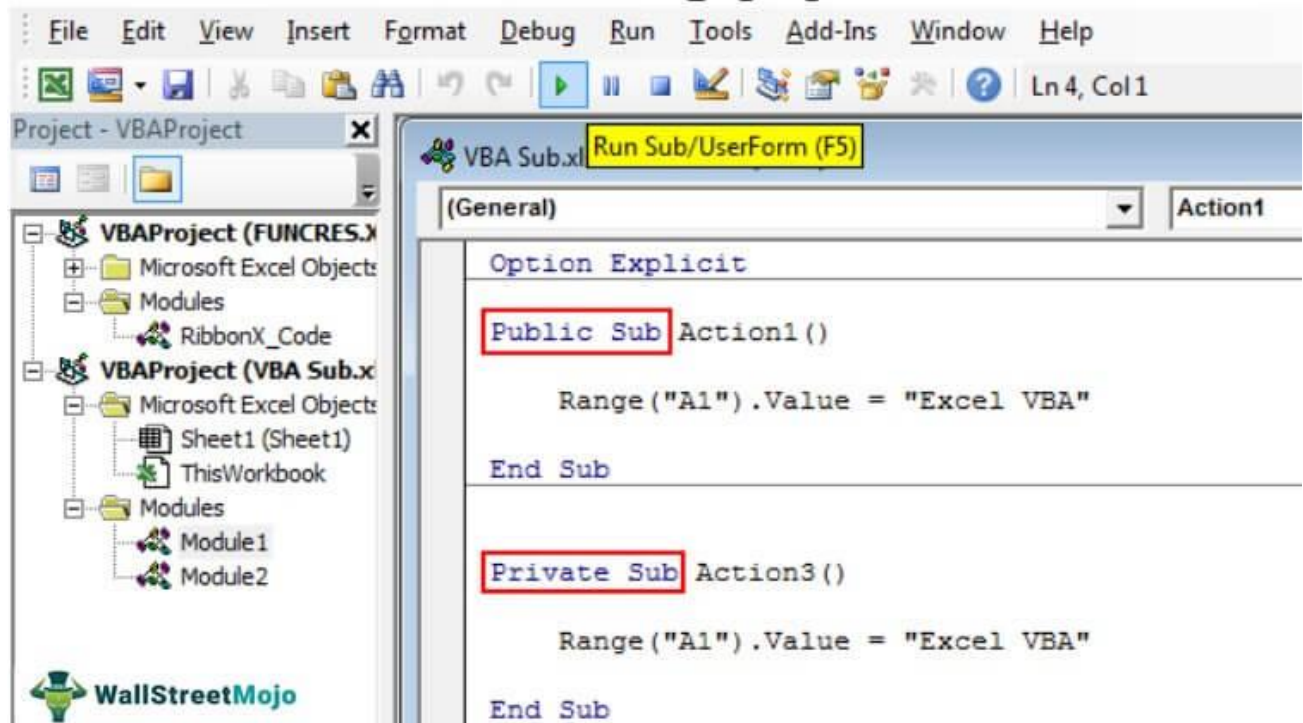
VBA Class Module



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

Ans- Procedures are code routines that perform specific tasks or actions. Procedures allows you to encapsulate a set of instructions into a named block of code.

VBA "Sub"



Function Procedure

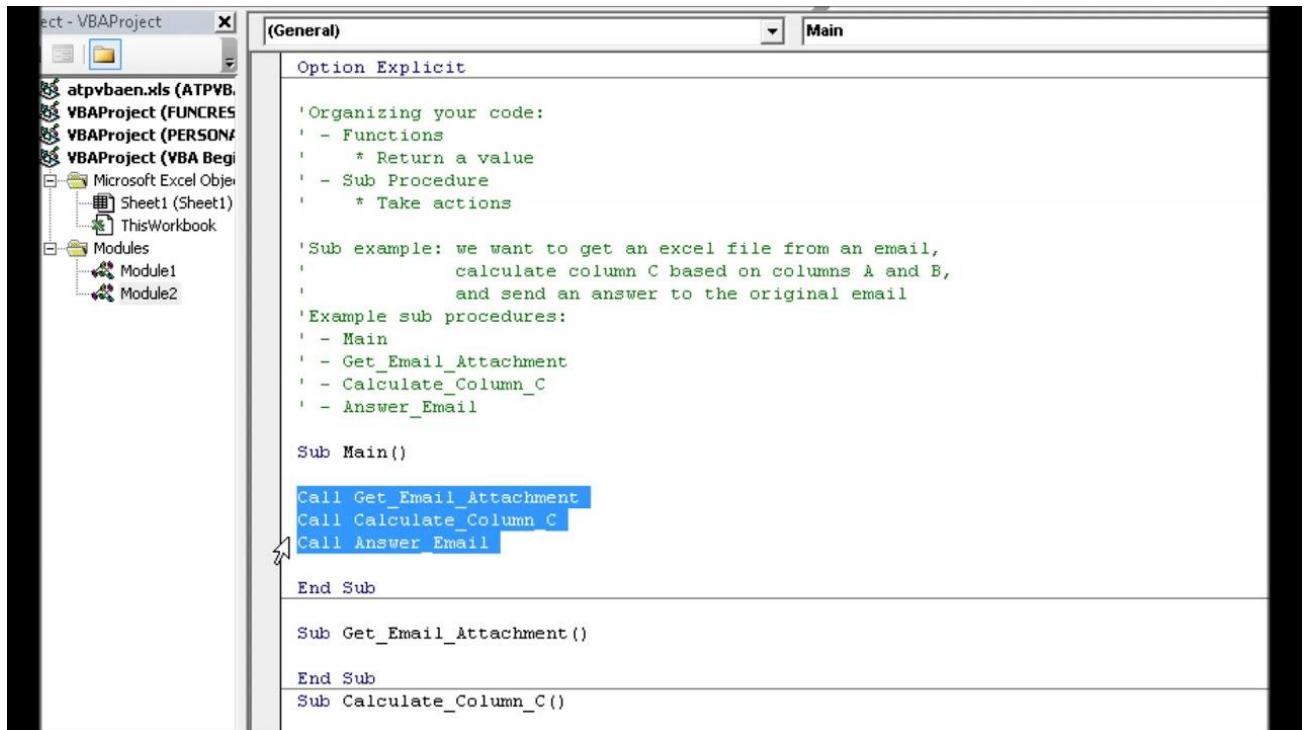
A function procedure is a procedure that returns a value. It performs specific task or calculations

Property Procedure

Property procedure is a special type of procedure that allows us to define behaviour and access property within class module or user-defined type.

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Function Procedure

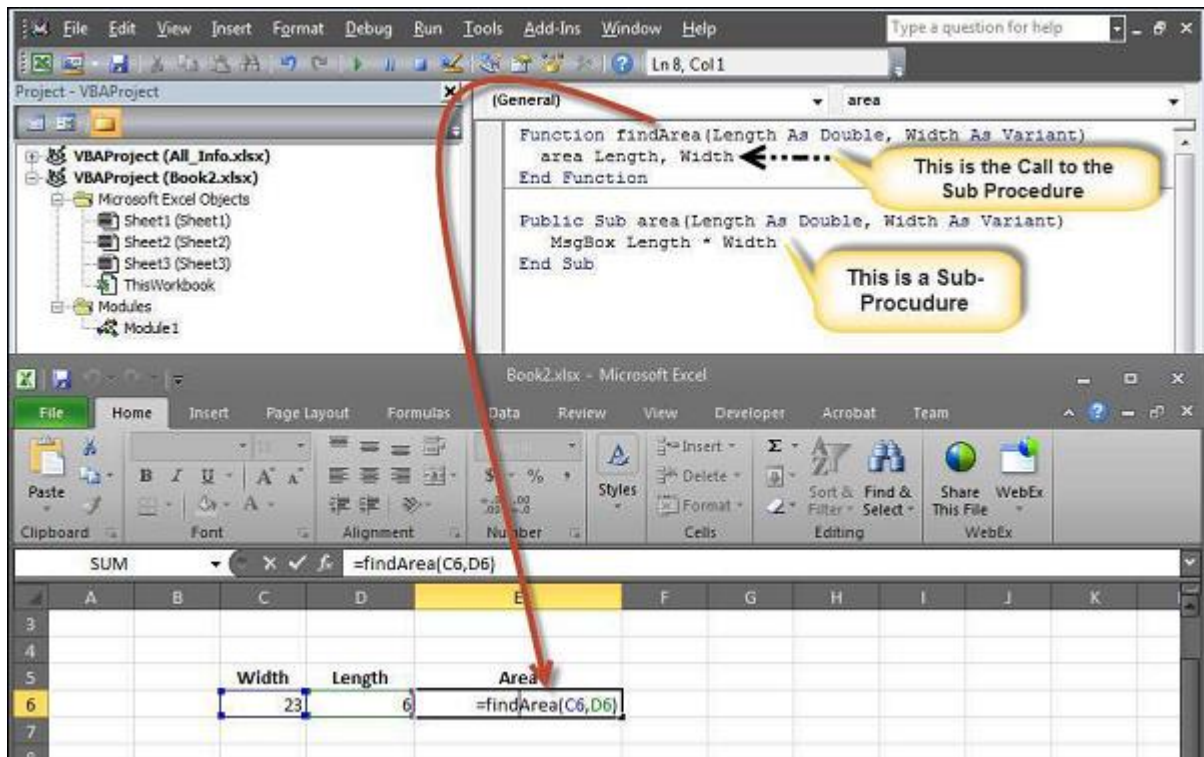
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5. What is a sub procedure and what are all the parts of a sub procedure and when are they used?

Ans- Sub procedure or subroutine is a block of code that performs specific task or actions. Sub procedure are used when we want a series of statements without returning a value.



Parts of Sub Procedure

- a) Procedure header- defines name of sub procedure
- b) Declarations- used to define variables and constants
- c) Executable Code- contains code that are to be excuted when sub procedure is called
- d) Exit Point- sub procedure completes its execution.

Situation when Sub Procedure used

- a) Data Manipulation- within VBA application
- b) Modular Code- allows to break down code into smaller and manageable code
- c) User interface interaction
- d) Code reusability
- e) Control Flow of execution of program.

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

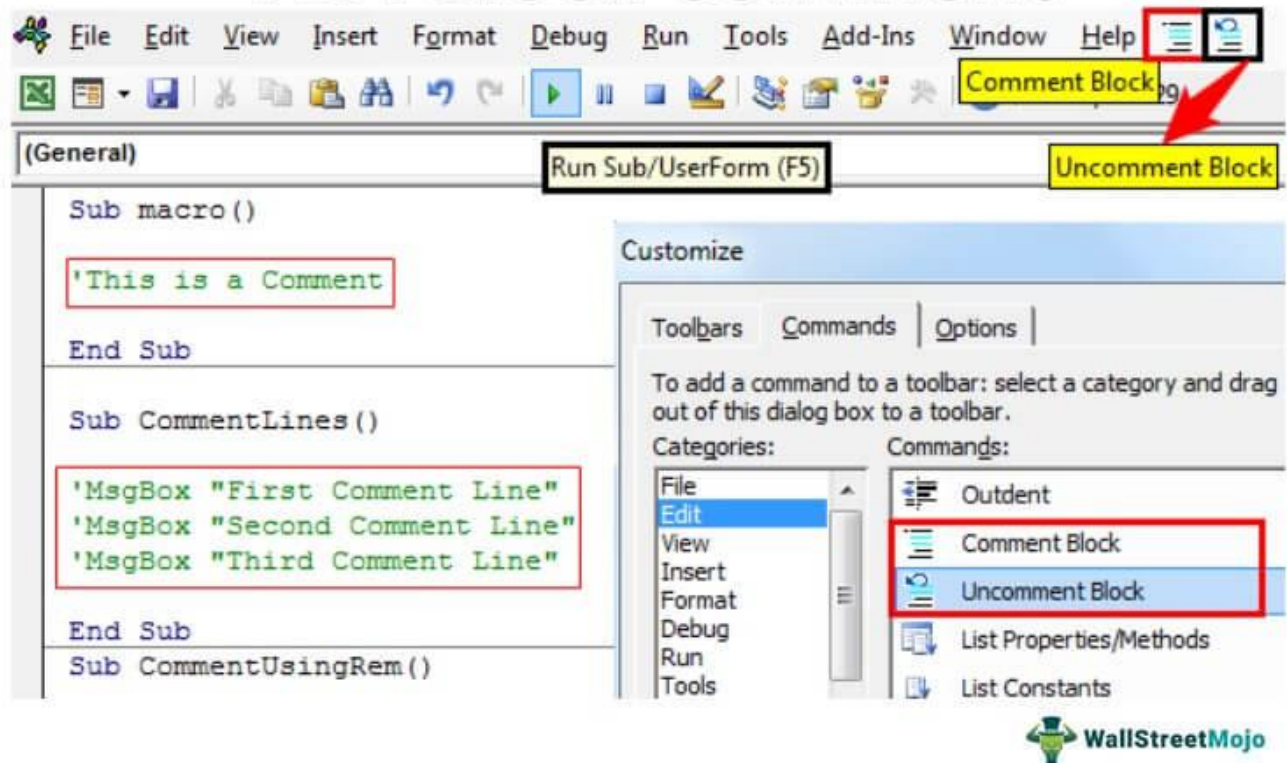
Ans- Comments are added for explanation and documentation of code. Comments are ignored by VBA compiler and do not affect execution of code.

Steps to add Comment

a)By apostrophe character for single line comment

b)Using “Rem” and “End” keyword for multi line comment

VBA Block Comment



Ways to add Multi Line Comment in VBA Code

By enclosing comments between “Rem” keyword and “End” keyword

Format Debug Run Tools Add-Ins Window Help

Ln 9, Col 27

(General) Macro1

Option Explicit

```
Sub Macro1()  
Rem The following Macro will select a range and fill with the yellow color.  
Range("A1:E11").Select  
With Selection.Interior  
    .Pattern = xlSolid  
    .PatternColorIndex = xlAutomatic  
    .Color = 65535 Rem color code for yellow  
    .TintAndShade = 0  
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End With  
End Sub
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Comment with Rem. Works only for entire line.

Rem color code for yellow

Error generated because Rem does not work inline like apostrophe.

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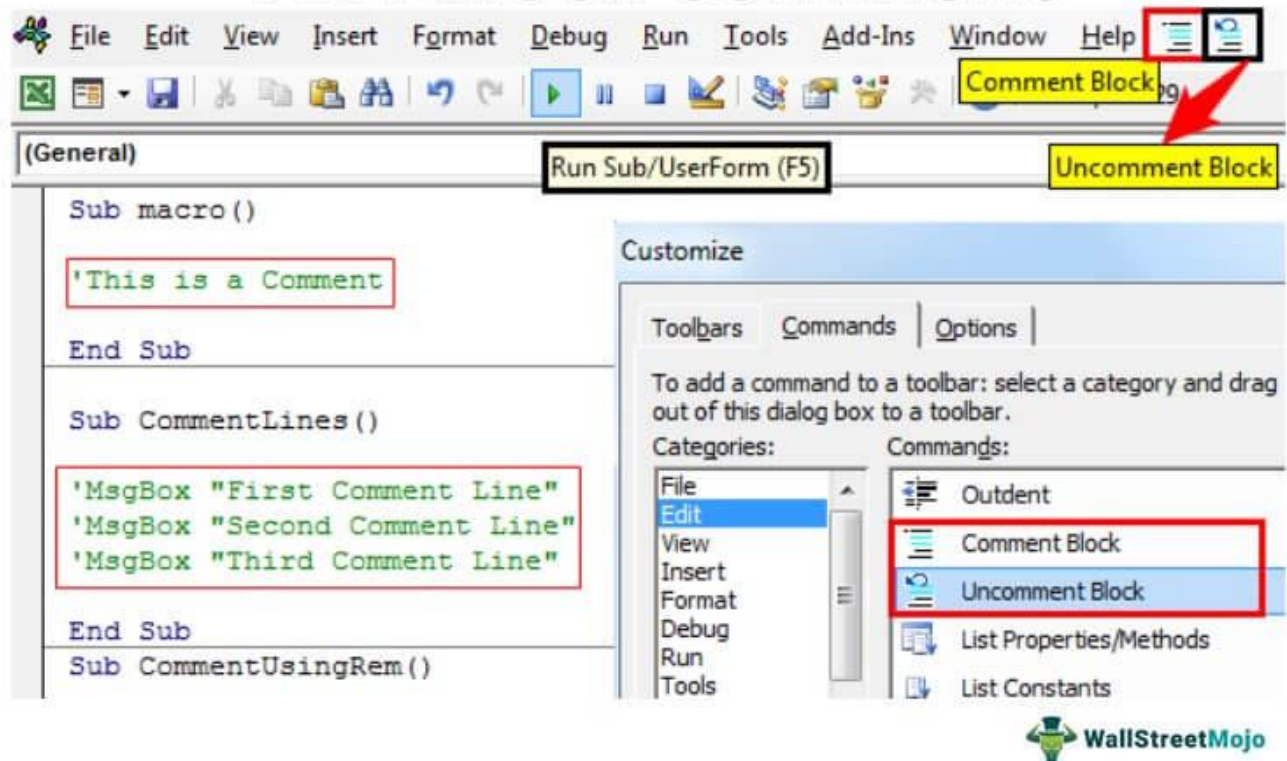
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iNeuron