

VBA SUB PROCEDURE

http://www.tutorialspoint.com/vba/vba_sub_procedure.htm

Copyright © tutorialspoint.com

Sub Procedures

Sub Procedures are similar to functions but there are few differences.

- Sub procedures DONOT Return a value while functions may or may not return a value.
- Sub procedures Can be called without call keyword.
- Sub procedures are always enclosed within **Sub** and **End Sub** statements.

Example :

```
Sub Area(x As Double, y As Double)
    MsgBox x * y
End Sub
```

Calling Procedures :

To invoke a Procedure somewhere in the script, you can make a call from a function. We will not be able to use the same way as that of a function as sub-procedure WILL NOT return a value.

```
Function findArea(Length As Double, Width As Variant)
    area Length, Width      ' To Calculate Area 'area' sub proc is called
End Function
```

1. Now we will be able to call the function only but not the sub procedure as shown below.

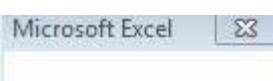
The screenshot shows the Microsoft Excel environment and the VBA Editor side-by-side. In the VBA Editor, a module named 'Module1' contains two definitions:

```
Function findArea(Length As Double, Width As Variant)
    area Length, Width      ' To Calculate Area 'area' sub proc is called
End Function

Public Sub area(Length As Double, Width As Variant)
    MsgBox Length * Width
End Sub
```

A red arrow points from the 'area' sub procedure definition in the VBA Editor to the 'Area' cell in the Excel spreadsheet. A yellow callout bubble labeled 'This is a Sub-Procedure' points to the 'area' sub procedure. Another yellow callout bubble labeled 'This is the Call to the Sub Procedure' points to the line of code 'area Length, Width' in the 'findArea' function. In the Excel spreadsheet, the formula '=findArea(C6,D6)' is entered into cell E6, which is highlighted in yellow. The values 23 and 6 are entered into cells C6 and D6 respectively. The result of the formula, '138', is displayed in cell E6.

2. The Area is calculated and shown only in Message box.



OK

3. The result cell displays ZERO as the area value is NOT returned from the function. In short, you cannot make a direct call to a subprocedure from the excel worksheet.

Width	Length	Area
23	6	0

The Output is shown as ZERO as the sub procedure displays the message box and no value is returned from the function.