

VBA SUB PROCEDURE

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

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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 displays the VBA Editor and the Microsoft Excel application. In the VBA Editor, the 'Project - VBAProject' window shows 'VBAPProject (Book2.xlsx)' with 'Module1' selected. The 'General' tab of the 'area' module is active, showing the following code:

```
Function findArea(Length As Double, Width As Variant)
    area Length, Width
End Function

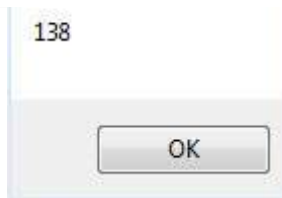
Public Sub area(Length As Double, Width As Variant)
    MsgBox Length * Width
End Sub
```

Two callouts are present: one pointing to the 'area Length, Width' line in the 'findArea' function with the text 'This is the Call to the Sub Procedure', and another pointing to the 'Public Sub area' line with the text 'This is a Sub-Procedure'.

In the Microsoft Excel application, the 'Book2.xlsx' file is open. The formula bar shows '=findArea(C6,D6)'. The worksheet grid shows columns A through K and rows 3 through 8. In row 6, column C, the value '23' is entered under the header 'Width'. In row 6, column D, the value '6' is entered under the header 'Length'. In row 6, column E, the formula '=findArea(C6,D6)' is entered under the header 'Area'. A red arrow points from the 'area' argument in the VBA code to the 'Area' header in the Excel worksheet.

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

Microsoft Excel



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.