

# How do I return a value from a VBA function and what are some examples of how to do so?

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VBA functions are designed to return a specific value or a result based on the arguments or inputs provided. To return a value from a VBA function, the keyword "return" is used followed by the desired value or expression.

For example, if we want to create a function that calculates the sum of two numbers and returns the result, we can write the following code:

```
Function Sum(a As Integer, b As Integer) As Integer
Sum = a + b
Return Sum
End Function
```

In this function, the "Return" statement is used to return the value of the variable "Sum", which is the result of the addition of the two input parameters "a" and "b".

Another way to return a value from a VBA function is by using the "Exit Function" statement. This statement allows the function to terminate and return a specific value, without executing any further code. This is useful when the function needs to return a specific value under certain conditions.

For example, if we want to create a function that checks if a given number is even or odd and returns a message based on the result, we can write the following code:

```
Function CheckEvenOdd(num As Integer) As String
If num Mod 2 = 0 Then
CheckEvenOdd = "Even"
Exit Function
Else
CheckEvenOdd = "Odd"
Exit Function
End If
End Function
```

In this function, the "Exit Function" statement is used to return the value "Even" or "Odd" based on the result of the "If" statement.

In summary, to return a value from a VBA function, the "return" keyword or the "Exit Function" statement can be used. The "return" keyword is used to return a specific value or expression, while the "Exit Function" statement is used to terminate the function and return a value without executing any further code.

## Return a Value from VBA Function (With Examples)

To return a value from a function in VBA, you must assign the value to the function name.

For example, we can create the following function to divide two values and then return the result of the division:

```
Function DivideValues(x, y)
```

```
DivideValues = x / y
```

```
End Function
```

The name of this function is `DivideValues`, so to return a value from this function we must assign the result of  $x / y$  to a variable with the same name of `DivideValues`.

If your function involves If Else logic, you can assign the value to the function name multiple times.

For example, you can create the following function that returns "Cannot divide by zero" if you attempt to divide by zero or else simply return the result of the division:

```
Function DivideValues(x, y)
```

```
If y = 0 Then
```

**DivideValues = "Cannot divide by zero"**

**Else**

**DivideValues = x / y**

**End IfEnd Function**

**The following example shows how to use this syntax in practice.**

**Example: How to Return Value from VBA Function**

**Suppose we would like to create a function in VBA to divide the value in cell A2 by the value in cell B2:**

	A	B	C	D	E	F
1	x	y				
2	50	10				
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						

**We can create the following function to do so:**

**Function DivideValues(x, y)**

**DivideValues = x / y**

**End Function**

**When we run this macro, we receive the following output:**

	A	B	C	D	E	F
1	x	y	x / y			
2	50	10	5			
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

**The function returns a value of 5, which is the result of 50 divided by 10.**

**We could also create a function that uses If Else logic to**

**first check if the value that we're dividing by is not equal to zero:**

**Function DivideValues(x, y)**

**If y = 0 Then**

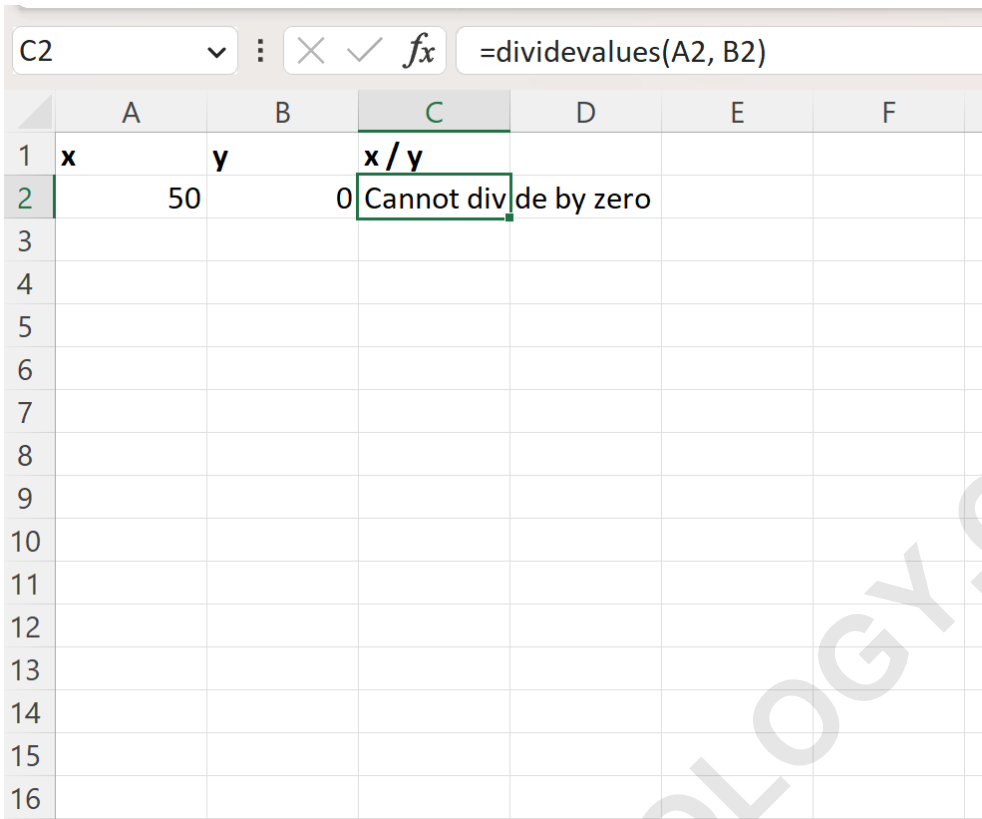
**DivideValues = "Cannot divide by zero"**

**Else**

**DivideValues = x / y**

**End IfEnd Function**

**If we change the value in cell B2 and then use this function to perform division, we'll receive the following output:**



	A	B	C	D	E	F
1	x	y	x / y			
2	50	0	Cannot divide by zero			
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

**Since we attempted to divide by zero, "Cannot divide by zero" is returned by the function.**