

How can I count the unique values within a specified range using VBA?

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This formal description explains the process of counting unique values within a specified range using VBA. VBA, or Visual Basic for Applications, is a programming language used to automate tasks in Microsoft Office applications, including Excel. To count unique values within a specified range in Excel using VBA, the following steps must be followed:

1. Select the range of data in which the unique values are to be counted.
2. Create a new module in the Visual Basic Editor.
3. Use the "For Each" loop to iterate through each cell in the selected range.
4. Use the "WorksheetFunction.CountIfs" method to check if the value in each cell is unique within the specified range.
5. If the value is unique, add it to a separate list.
6. Finally, use the "WorksheetFunction.CountA" method to count the number of unique values in the list.

By following these steps, one can efficiently count the unique values within a specified range using VBA.

Count Unique Values in Range Using VBA

You can use the following basic syntax to count the number of unique values in a range using VBA:

```
Sub CountUnique()
```

```
Dim Rng As Range, List As Object, UniqueCount As Long
```

```
Set List = CreateObject("Scripting.Dictionary")
```

```
'count unique values in range A2:A11ForEach Rng In Range("A2:A11")
```

```
If Not List.Exists(Rng.Value) Then List.Add Rng.Value, Nothing
```

```
Next 'store unique count
```

UniqueCount = List.Count

'display unique count

MsgBox "Count of Unique Values: " & UniqueCount

End Sub

This particular example counts the number of unique values in the range A2:A11 and then displays the count in a message box.

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

Example: Count Unique Values in Range Using VBA

Suppose we have the following list of basketball team names in Excel:

	A	B	C	D	E	F	G
1	Team						
2	Mavs						
3	Heat						
4	Mavs						
5	Nets						
6	Nets						
7	Warriors						
8	Nets						
9	Mavs						
10	Heat						
11	Kings						
12							
13							
14							
15							
16							
17							
18							

Suppose we would like to count the number of unique team names in the range A2:A11.

We can create the following macro to do so:

```
Sub CountUnique() Dim Rng As Range, List As Object, UniqueCount As Long
```

```
Set List = CreateObject("Scripting.Dictionary")'count unique values in range A2:A11 For Each Rng In Range("A2:A11")
```

```
If Not List.Exists(Rng.Value) Then List.Add Rng.Value, Nothing
```

Next'store unique count

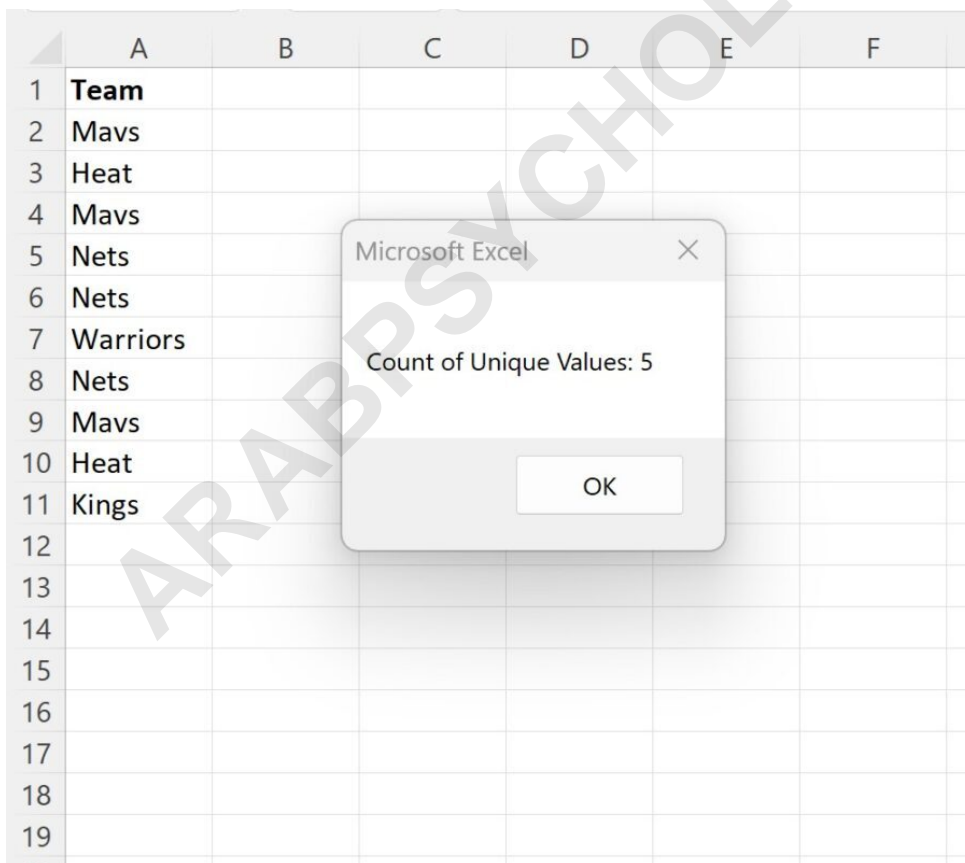
UniqueCount = List.Count

'display unique count

MsgBox "Count of Unique Values: " & UniqueCount

End Sub

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



The screenshot shows an Excel spreadsheet with the following data in column A:

	A	B	C	D	E	F
1	Team					
2	Mavs					
3	Heat					
4	Mavs					
5	Nets					
6	Nets					
7	Warriors					
8	Nets					
9	Mavs					
10	Heat					
11	Kings					
12						
13						
14						
15						
16						
17						
18						
19						

Overlaid on the spreadsheet is a message box titled "Microsoft Excel" with the text "Count of Unique Values: 5" and an "OK" button.

The message box tells us that there are 5 unique team

names.

We can verify that this is correct by manually identifying each of the unique team names:

MavsHeatNetsWarriorsKings

There are indeed 5 unique team names.

Note: To count the number of unique values in a different range, simply change A2:A11 in the For Each loop to a different range.

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