

Re: What is the difference between for..if, case statements, do..while

Source:

<http://www.tech-archive.net/Archive/Excel/microsoft.public.excel.programming/2007-09/msg00630.html>

- From: dan@xxxxxxxxxxxxxxxxxxxx
 - Date: Thu, 06 Sep 2007 09:04:54 -0700
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Hi Jim,

I do appreciate your explanation and time. Thanks for your feedback.

Dan

On Sep 5, 4:44 pm, Jim Thomlinson <James_Thomlin...@owfg-Re-Move-This-.com> wrote:

In programming there are only 3 things you can do. You can write a series of instruction to be run in sequence. You can write a selection structure which causes the program to follow one path of execution or another. Finally you can write a structure to loop through the same code over and over until a certain condition is met. Most of your questions revolve around these concepts.

Selection Structures *****

If / Then / Else

Select Case

Both of the above structures cause your program to fork into different paths of execution. Some lines of code will be executed and other will not depending on which criteria are met or not met.

If then Else is the simplest to understand. If X is true then do this else do that.

A little more complicated is

If Then

ElseIf Then

Else

EndIf

This structure runs through multiple criteria to determine the appropriate code to run. For Example

If x > 10 then

To That

elseif x > 0 then

Do That

Else

Do TheOther

Re: What is the difference between for..if, case statements, do..while

EndIf

It is important to note that only one of the instructions This or That or TheOther can possible be run. It can not execute both This and That or any other combination.

Select Case is just another version of the If Then / ElseIf Then / Else structure. It takes a look at a single value and compares it to a number of possible cases to determine the flow of execution.

If Then / ElseIf Then / Else – is handy when you want to evaluate different things such as

```
If x = 10 then
elseif y = 20 then
elseif z = 30 then
else
```

Select Case is handy whe you want to evaluate the same thing aginast a number of possible cases

```
Select Case X
Case 10, 20, 30
Case 40, 50, 60
Case else
```

Looping Structures*****

For Each

Do While

Loop Until

For Each is handy for traversing all of the objects in a collection such as all of the sheets in a workbook

```
dim wks as worksheet
for each wks in worksheets
msgbox wks.name
next wks
```

Do while an loop until cause you to loop throgh the same st of instructions until a condition is met. The difference is Do While ceches the criteria before you enter the loop where as loop until only evaluates the condition after the loop code has executed once. So it depends on when you want to check your condition.

With *****

With is a construct designed to make you life a little easier and to make code execute a little bit faster. What it does is it tells the computer to reference back to a certain item until further notice. For example if I want to do a bunch of things to a specific cell on a specific sheet then I could either do this

```
Sheets("Sheet1").Range("A1").Value = 10
Sheets("Sheet1").Range("A1").Interior.ColorIndex = 34
Sheets("Sheet1").Range("A1").Font.ColorIndex = 1
Sheets("Sheet1").Range("A1").BorderAround = True
or
```

Re: What is the difference between for..if, case statements, do..while

```
With Sheets("Sheet1").Range("A1")  
.Value = 10  
.Interior.ColorIndex = 34  
.Font.ColorIndex = 1  
.Font.ColorIndex = 1  
.BorderAround = True  
End With
```

Note that the code using the with statement is a pile shorter to write. It will also execute faster because the computer does not have to keep making a reference to Sheets("Sheet1").Range("A1") every time it want to make a change to that cell.

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HTH...

Jim Thomlinson

"d...@xxxxxxxxxxxxxxxxxxx" wrote:

I'm using Excel 2000 on Windows 2000 professional.

I've been employed since February to provide solutions in Excel and Access 2000. I've been successful finding examples in the newsgroups and revising them to my projects.

However, I have a big knowledge gap and I'm requesting your direction.

How does one decide which programming construct to use.

Are there some questions I could answer that would help me determine when to use:

With
if
For..if
Do..While
Case

I also would like to learn the proper syntax for these constructs.

Re: What is the difference between for..if, case statements, do..while

I've purchased John Walkenbach's "Microsoft Excel 2000 Bible, and Ken Getz's "Access 2000 Developer's Handbook", but I am still not clear on these concepts.

Is there anyone that would direct me to learning source?

Thanks,

Dan Dungan