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Subject: Re: Starting a for loop within an if loop  
Posted by [Mat Smith](#) on Thu, 20 Dec 2007 06:15:21 GMT  
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On Dec 20, 1:14 am, David Fanning <n...@dfanning.com> wrote:

```
> Mat Smith writes:
>> I'm trying to write a program with some keywords, so that depending
>> upon my mood I can alter what it does.
>
>> What I want to do is most of the time just run the program, but I want
>> to include an option to do a for loop.
>
>> Basically, I need something like:
>
>> IF keyword_set(mc) THEN BEGIN
>> FOR i=0,n-1 DO BEGIN
>>   t=d[i]
>> ENDIF
>
>> and later in the program
>
>> IF keyword_set(mc) THEN BEGIN
>> ENDFOR
>> ENDIF
>
>> Thus the rest of the program runs normally with and without the for
>> loop (it just uses t).
>> However, IDL doesn't understand this - it wants an ENDFOR before the
>> ENDIF.
>
>> Any thoughts on how I can get around this? It's entirely possible that
>> I'm missing something obvious.
>
> It's possible. Have you taught yourself to program?
> Sometimes there can be gaps. :-)
>
> Anyway, I think I would do something like this:
>
> IF keyword_set(mc) THEN endloop = n ELSE endloop = 1
> FOR j=0,endloop-1 DO BEGIN
>   ...
> ENDFOR
>
> This way, if your keyword is set, you will do the loop n times,
> otherwise you will do the loop just once.
>
> Cheers,
```

> David  
> --  
> David Fanning, Ph.D.  
> Fanning Software Consulting, Inc.  
> Coyote's Guide to IDL Programming:<http://www.dfanning.com/>  
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Hi David,

I have indeed taught myself to program, and there are undoubtedly huge gaps!! I've never been one for learn the basics - I'm more of a dive in and solve problems as they come!

If I read your reply correctly, I don't think that it'll do what I want it to, but I can adapt it so that it will!

The problem was that I wanted to have different structures depending on if the keyword is set.

That is if the keyword isn't set then it will have a particular values, but if it is set, then it will run the loop AND the values will always be different to when the keyword isn't set (i.e. loop of 1 isn't the not keyword).

So before I had

```
IF NOT keyword_set(mc) THEN BEGIN
t=s
ENDIF ELSE BEGIN
FOR i=0,k-1 DO BEGIN
t=d[i]
ENDELSE
... working on t
ENDFOR - which obviously didn't work
```

But I can adapt your suggestion to make it work - i.e. in the for loop call another if loop! e.g.

```
IF keyword_set(mc) THEN endloop = n ELSE endloop = 1
FOR j=0,endloop-1 DO BEGIN
IF NOT keyword_set(mc) THEN BEGIN
t=s[j]
ENDIF ELSE BEGIN
t=d[j]
ENDELSE
...woking on t
ENDFOR
```

Does this make sense? It's very long-winded (there must be a quicker way!). I'm trying to be clever and I'm probably making my programs too generic. I'm also probably missing something simple (thanks to the learning it as I go!)

Thanks

Mat

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