
Subject: BREAK statement

Posted by [g.nacarts](#) on Wed, 01 Jul 2015 15:41:32 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi I typed the following:

```
A = sqrt(Ax^2 + Ay^2)
```

```
nozero = where(A ne 0, cnt)
```

```
if cnt eq 0 then break
```

I got the following error:

BREAK must be enclosed within a loop (FOR, WHILE, REPEAT), CASE, or SWITCH statement.

The error is very clear. I am not sure if the following is equivalent

```
A = sqrt(Ax^2 + Ay^2)
```

```
nozero = where(A ne 0, cnt)
```

```
if cnt eq 0 then return
```

Using the return instead of break because that part of code does not enclosed within a loop. If not so, can anyone suggest a statement doing the same thing as BREAK without being enclosed within a loop?

Subject: Re: BREAK statement

Posted by [Helder Marchetto](#) on Wed, 01 Jul 2015 15:55:10 GMT

[View Forum Message](#) <> [Reply to Message](#)

On Wednesday, July 1, 2015 at 5:41:35 PM UTC+2, g.na...@gmail.com wrote:

> Hi I typed the following:

>

> A = sqrt(Ax^2 + Ay^2)

>

> nozero = where(A ne 0, cnt)

> if cnt eq 0 then break

>

> I got the following error:

> BREAK must be enclosed within a loop (FOR, WHILE, REPEAT), CASE, or SWITCH statement.

>

> The error is very clear. I am not sure if the following is equivalent

>

> A = sqrt(Ax^2 + Ay^2)

>

> nozero = where(A ne 0, cnt)

> if cnt eq 0 then return

>
> Using the return instead of break because that part of code does not enclosed within a loop. If not so, can anyone suggest a statement doing the same thing as BREAK without being enclosed within a loop?

Break and Return are simply different.
From the help

Break: exits a loop (as said in the error code)
Return: causes the program context to revert to the next-higher program level

In other words:

```
pro runTest
  print, 'start test'
  testBreakReturn
  print, 'end test'
end
```

```
Pro testBreakReturn
  for i=0,10 do begin
    print, 'counting ',i
    if i eq 5 then break
  endfor
  print, "I'm out of the for loop!"
  print, 'Now I will call the return statement'
  return
  print, 'this line will not be executed because the return makes me return to the previous pro!'
end
```

I hope it is clear.

Look up:
<http://www.exelisvis.com/docs/BREAK.html>
<http://www.exelisvis.com/docs/RETURN.html>

Cheers,
Helder

Subject: Re: BREAK statement
Posted by [chris_torrence@NOSPAM](#) on Wed, 01 Jul 2015 17:17:27 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Wednesday, July 1, 2015 at 9:55:12 AM UTC-6, Helder wrote:
> On Wednesday, July 1, 2015 at 5:41:35 PM UTC+2, g.na...@gmail.com wrote:
>> Hi I typed the following:
>>

```

>> A = sqrt(Ax^2 + Ay^2)
>>
>> nozero = where(A ne 0, cnt)
>> if cnt eq 0 then break
>>
>> I got the following error:
>> BREAK must be enclosed within a loop (FOR, WHILE, REPEAT), CASE, or SWITCH
statement.
>>
>> The error is very clear. I am not sure if the following is equivalent
>>
>> A = sqrt(Ax^2 + Ay^2)
>>
>> nozero = where(A ne 0, cnt)
>> if cnt eq 0 then return
>>
>> Using the return instead of break because that part of code does not enclosed within a loop. If
not so, can anyone suggest a statement doing the same thing as BREAK without being enclosed
within a loop?
>
> Break and Return are simply different.
> From the help
>
> Break: exits a loop (as said in the error code)
> Return: causes the program context to revert to the next-higher program level
>
> In other words:
>
> pro runTest
>   print, 'start test'
>   testBreakReturn
>   print, 'end test'
> end
>
> Pro testBreakReturn
>   for i=0,10 do begin
>     print, 'counting ',i
>     if i eq 5 then break
>   endfor
>   print, "I'm out of the for loop!"
>   print, 'Now I will call the return statement'
>   return
>   print, 'this line will not be executed becuae the return makes me return to the previous pro!'
> end
>
> I hope it is clear.
>
> Look up:

```

> <http://www.exelisvis.com/docs/BREAK.html>
> <http://www.exelisvis.com/docs/RETURN.html>
>
> Cheers,
> Helder

Maybe you want to use "STOP" to actually halt execution?

-Chris

Subject: Re: BREAK statement
Posted by [g.nacarts](#) on Fri, 03 Jul 2015 14:07:13 GMT
[View Forum Message](#) <> [Reply to Message](#)

Thanks Helder, your example it makes sense but still something confuses me.

I had the following procedure

```
PRO TEST
while iter_lim_count lt iter_lim do begin
  for m=0L,nB-1 do begin
    for n=0L,nB-1 do begin
      A[m,n]+=X
    tmp =
    B[m,n] = (tmp - init)/X
    A[m,n]-=X
  endfor
  endfor
  while tmp GT init do BEGIN
PRINT,'WHILE LOOP'
  beta_test = beta_test*2.
  A_test = B - beta_test*B
  if beta_test LT 0.5 then return
ENDWHILE
PRINT,'EXIT WHILE LOOP'
  A = A_test
  iter_lim_count = iter_lim_count+1
endwhile
END
```

The only thing I've changed is to split the whole procedure into two parts and call them in the TEST pro.

```
PRO TESTING_A
  for m=0L,nB-1 do begin
    for n=0L,nB-1 do begin
      A[m,n]+=X
```

```

tmp =
B[m,n] = (tmp - init)/X
A[m,n]-=X
endfor
endfor
END

PRO TESTING_beta
while tmp GT init do BEGIN
PRINT,'WHILE LOOP'
  beta_test = beta_test*2.
  A_test = B - beta_test*B
  if beta_test LT 0.1 then return
ENDWHILE
PRINT,'EXIT WHILE LOOP'
  A = A_test
END

```

```

PRO TEST
while iter_lim_count lt iter_lim do begin
TESTING_A
TESTING_beta
iter_lim_count = iter_lim_count+1
endwhile
END

```

I noticed that in the TESTING_beta pro the 'WHILE LOOP' was printing but the 'EXIT WHILE LOOP' never prints out. I am confused because before that I had everything in one function both 'WHILE LOOP' and 'EXIT WHILE LOOP' are printed out. Why now the 'EXIT WHILE LOOP' does not printed out?

Subject: Re: BREAK statement
 Posted by [g.nacarts](#) on Fri, 03 Jul 2015 15:31:23 GMT
[View Forum Message](#) <> [Reply to Message](#)

If the problem is the way that I passed the variables then why when I used the BREAK instead of RETURN the 'EXIT WHILE LOOP' printed? I am not saying that is the same thing obviously is doing something different but the A_test was there. That's why I get confused.

The problem is that the A_test that I need is "disappeared" instead of updated. But I can't use the BREAK because I want the value passed out of the function and the RETURN defines this value.

Subject: Re: BREAK statement
 Posted by [Helder Marchetto](#) on Fri, 03 Jul 2015 15:57:42 GMT

On Friday, July 3, 2015 at 5:31:25 PM UTC+2, g.na...@gmail.com wrote:

> If the problem is the way that I passed the variables then why when I used the BREAK instead of RETURN the 'EXIT WHILE LOOP' printed? I am not saying that is the same thing obviously is doing something different but the A_test was there. That's why I get confused.

Yes, you're for sure confused.

break exits the while loop and then the print "exit while loop" is printed. Return exits the procedure.

I don't think you will find someone willing to understand your problem and explain the basics of programming. It's Friday afternoon, at least here, and the weekend has either already started or is going to start pretty soon. There's no better time to get your hands on a programming book or tutorial and see how all these loops, procedures and functions work together.

Good luck.

Cheers,
Helder
