
Subject: help with stopping criterion - use of BREAK
Posted by [g.nacarts](#) on Wed, 28 Jan 2015 17:09:51 GMT
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Hi

I am using an iterative method and I want to add a stopping criterion in which the iterating will stop when there is no change in 3 consecutive iterations. I did the following but I am getting syntax error but I am not sure whether the use of BREAK it's correct. My code is as follows:

```
COUNTER = 0
IF ABS(OLD_VALUE-NEW_VALUE) EQ 0 THEN COUNTER = COUNTER + 1 $
ELSE COUNTER = 0

IF COUNTER EQ 3 THEN
BREAK
ENDIF
```

Subject: Re: help with stopping criterion - use of BREAK
Posted by [Craig Markwardt](#) on Wed, 28 Jan 2015 17:46:50 GMT
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On Wednesday, January 28, 2015 at 12:09:52 PM UTC-5, g.na...@gmail.com wrote:

```
> Hi
>
> I am using an iterative method and I want to add a stopping criterion in which the iterating will
> stop when there is no change in 3 consecutive iterations. I did the following but I am getting
> syntax error but I am not sure whether the use of BREAK it's correct. My code is as follows:
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> COUNTER = 0
> IF ABS(OLD_VALUE-NEW_VALUE) EQ 0 THEN COUNTER = COUNTER + 1 $
> ELSE COUNTER = 0
>
> IF COUNTER EQ 3 THEN
> BREAK
> ENDIF
```

IDL is line oriented. You can extend lines with \$ like you did in the first part of your code.

This statement:

```
> IF COUNTER EQ 3 THEN
```

is a syntax error.

This statement:

```
> IF COUNTER EQ 3 THEN BREAK
```

is not a syntax error. Nor is this,

```
> IF COUNTER EQ 3 THEN $
```

> BREAK

Craig

Subject: Re: help with stopping criterion - use of BREAK
Posted by [mick.mitanirc3](#) on Thu, 05 Feb 2015 21:26:17 GMT
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Why are you using the `abs()` function in your comparison? Since you are comparing your result to 0 the sign doesn't matter. Mathematically -0 is possible but unless you are doing some crazy stuff you won't get it and that's even providing that IDL allows integer 0 to have a sign.
