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Subject: Re: Loop breaks IDL

Posted by [Jeremy Bailin](#) on Sat, 23 Aug 2008 03:42:03 GMT

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On Aug 22, 11:23 pm, mbwel...@gmail.com wrote:

```
> I beginning to feel like I'm inundating this board :)
>
> Is this the best way to do this, I 'm beginning to think not since IDL
> (in windows) starts to use up all my cpu cycles for more than 10
> minutes.
>
> -----
> ind_e= where (array[1,*] eq 2,count)
> if count eq 0 then tl_small=0 else ext=array[* ,ind_e]
> while count gt 0 do begin
>   ext_ = where(ext[2,*] lt 2*x1) ; select faults such that L < 2x
>   ext_small = ext[* ,ext_] ; place in matrice with identifier
>   lc_small= ext_small[2,*] ; select only lengths to sum for
>   small faults
>   tl_small = total(lc_small^3) ; sum lengths according to
>   kostrov summation, small faults
> endwhile
> -----
>
> Essentially there are 2 divisions, column 2 (with values of 1 or 2)
> and fault size (large or small) of the data.
> In case it's not obvious, the first two lines are saying that if there
> is no data then tl_small = 0. If however, there is data do everything
> below it to get some non 0 value of tl_small.
> It seems like IDL just hangs up on the loop. Maybe this has something
> to do with the embedded where statements?
>
> As always thanks in advance and any help would be appreciated
>
> ~Matt.
```

The probelm is that it keeps going through the loop over and over again waiting for count to no longer be greater than zero... but count never changes within the loop, so "count gt 0" is always true.

-Jeremy.

---

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Subject: Re: Loop breaks IDL

Posted by [David Fanning](#) on Sat, 23 Aug 2008 03:47:21 GMT

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mbweller@gmail.com writes:

```
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>
> Is this the best way to do this, I 'm beginning to think not since IDL
> (in windows) starts to use up all my cpu cycles for more than 10
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> is no data then tl_small = 0. If however, there is data do everything
> below it to get some non 0 value of tl_small.
> It seems like IDL just hangs up on the loop. Maybe this has something
> to do with the embedded where statements?
>
> As always thanks in advance and any help would be appreciated
```

I would try transposing your array so you can access the data in memory order. That should help a LOT.

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.")

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Subject: Re: Loop breaks IDL

Posted by [David Fanning](#) on Sat, 23 Aug 2008 03:48:33 GMT

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Jeremy Bailin writes:

> The probelm is that it keeps going through the loop over and over  
> again waiting for count to no longer be greater than zero... but count  
> never changes within the loop, so "count gt 0" is always true.

Well, that, too. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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Sepore ma de ni thui. ("Perhaps thou speakest truth.")

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Subject: Re: Loop breaks IDL

Posted by [mbweller](#) on Sat, 23 Aug 2008 05:42:34 GMT

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On Aug 22, 8:48 pm, David Fanning <n...@dfanning.com> wrote:

> Jeremy Bailin writes:

>> The probelm is that it keeps going through the loop over and over  
>> again waiting for count to no longer be greater than zero... but count  
>> never changes within the loop, so "count gt 0" is always true.

>

> Well, that, too. :-)

>

> 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.")

It sound as if the while statement is not the correct approach, or at least not count gt 0. What might work instead then?

~Matt

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Subject: Re: Loop breaks IDL  
Posted by [Chris\[6\]](#) on Sat, 23 Aug 2008 06:47:21 GMT  
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try this

```
ind_e=where(array[1,*] eq 2, count)
if count eq 0 then tl_small=0 else begin
  ext=array[* ,ind_e]
  ext_test=where(ext[2,*] lt 2*x1, ct)
  if ct eq 0 then tl_small=0 else tl_small=total(ext[2,ext_test]^3)
endelse
```

or, more compactly,

```
tl_small=total(array[2,*]^3*((array[1,*] eq 2) and (array[2,*] lt
2*x1)))
```

chris

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Subject: Re: Loop breaks IDL  
Posted by [mbweller](#) on Sat, 23 Aug 2008 19:51:46 GMT  
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Well, that's what I get for staring at the computer screen for too long while doing monotonous tasks, my brain stops working. I figured out how to fix it with an if then begin statement, but it is always nice to see other approaches, gives someone ideas.

Thanks for all the help.

~Matt

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