
Subject: AND statements

Posted by [Phil Aldis](#) on Sun, 28 Feb 1999 08:00:00 GMT

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Hi,

If you write some code like this:

```
test=Ptr_New()
```

```
IF Ptr_Valid(test) AND Size(*test, /type) NE 10 THEN print, *test
```

....can you always guarantee that it will not try to evaluate the second statement if the first one was false - or is this a dangerous tactic to adopt?

Oh, by the way, in a day or two I should be able to put out a little bit of code which might be of interest to some. I did it at home so unlike most of my programs I can let others use it. It will (hopefully) when passed a pointer free up any heap memory, including, pointer arrays, structures, objects. I suppose I could fairly simply extend it to object references by simply using Obj_Class on the passed object reference, then using Execute to create a structure and then it would be just like normal. Although that addition might take a little while longer. If anyone has any suggestions, please e-mail to let me know, (or if someone else has done a program like this before).

Cheers,
Phil

P.S. If you reply, can you cc to philaldis@geocities.com, as well as to the newsgroup, as my newsgroup feed seems to be more than a little selective about the messages it picks up.

Subject: Re: AND statements

Posted by [steinhh](#) on Sat, 06 Mar 1999 08:00:00 GMT

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In article <O0s\$q03Z#GA.227@nih2naae.prod2.compuserve.com>
"Steve Scheele" <sscheele@scitor.com> writes:

```
> I wrote the previous message late at night - it really wasn't what I was
> thinking. I think that compound AND statements can be concisely written as;
>
> If Not (A EQ 0) Then If B/A GT 5 Then . . .
>
> Formed in this manner, the second part will not be evaluated is the first
> part is false.
```

True. The "problem" is when you want to write this up into a short and concise test with an ELSE part, you'll have to repeat the ELSE branch:

```
IF NOT (A EQ 0) THEN IF B/A GT 5 THEN <SOMETHING> $
ELSE <SOMETHING_ELSE> $
ELSE <SOMETHING_ELSE>
```

(Where the second SOMETHING_ELSE is the same as the first one)

The ?: construct gives a more compact notation:

```
IF ((A EQ 0) ? 0b : B/A GT 5) THEN <SOMETHING> $
ELSE <SOMETHING_ELSE>
```

Personally, though, I don't like using the ?: construct for anything but assignments, since it tends to clutter up more complex statements..

> The problem that I have is with the OR statement. Something
> like
>
> If A EQ 0 OR B/A GT 5
>
> will blow up on A=0
>
> I haven't really figured out a good way to implement this type of OR
> statement.

```
IF (A EQ 0) ? 1b : B/A GT 5 THEN ...
```

But again, this isn't very readable...

Stein Vidar

Subject: Re: AND statements
Posted by [Martin Schultz](#) on Mon, 08 Mar 1999 08:00:00 GMT
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Stein Vidar Hagfors Haugan wrote:

>
>
> True. The "problem" is when you want to write this up into
> a short and concise test with an ELSE part, you'll have to
> repeat the ELSE branch:
>

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> ELSE <SOMETHING_ELSE> $
> ELSE <SOMETHING_ELSE>
>
> (Where the second SOMETHING_ELSE is the same as the first one)
>
> [...]
```

in short this is the same as
IF E1 THEN (IF E2 THEN A ELSE B) ELSE C

I don't think there are that many cases where B is really the same as C.
If so,
I find it often in error checking (is there a filename? is it empty?
etc.). In
these cases, it is often useful to "invert" the above to e.g.

```
IF NOT E1 THEN RETURN
IF E2 THEN A ELSE B
```

Shame on me(?), but sometimes I even think of and use GOTO statements in
similar
constructs. For skipping large convoluted IF THEN ELSE IF THEN ELSE
ENDIF IF ...
blocks, they are sometimes much more readable.

But it is true that I have often wished IDL had the abbreviated IF
clause. In my experience this is so common in modern computer languages
that it is rather dangerous *not* to have it available.

Regards,
Martin.

--

Dr. Martin Schultz
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fax : (617)-495-4551

e-mail: mgs@io.harvard.edu
Internet-homepage: <http://www-as.harvard.edu/people/staff/mgs/>

Subject: Re: AND statements

Posted by [philaldis](#) on Tue, 09 Mar 1999 08:00:00 GMT

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I'll just post it again in case anyone was confused about the signature. (different people using the same machine)

Martin Schultz <mgs@io.harvard.edu> wrote:

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>> IF NOT (A EQ 0) THEN IF B/A GT 5 THEN <SOMETHING> $
>> ELSE <SOMETHING_ELSE> $
>> ELSE <SOMETHING_ELSE>
>>
>> (Where the second SOMETHING_ELSE is the same as the first one)
>>
>> [...]
>
> in short this is the same as
> IF E1 THEN ( IF E2 THEN A ELSE B ) ELSE C
>
> I don't think there are that many cases where B is really the same as C.
```

Well I've had it quite often when I've been dealing with pointers and I want to find out if what a pointer points to is whatever, but the pointer might be null. I then obviously have to have a first test for
IF Ptr_Valid(pointer) THEN BEGIN
IF *pointer EQ whatever THEN BEGIN

```
.
.
.
.
ENDIF ELSE (carry out code for failed pointer)
ENDIF ELSE (carry out code for failed pointer)
```

The pointer failing due to it not been valid is the same kind of failing as it not pointing to whatever so I have to either write code twice or set a flag at (carry..) part and then do
IF flag EQ 1 THEN ,

I think that is certainly better than a goto in that circumstance. I had to use that several times in the ptr_free program I wrote (see post of 04/03/99), but then no-one would know about that been as not one person has looked at it - oh well I'll leave programs that are of use to others to the likes of DWF.

Cheers,
Phil

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Posted by [philaldis](#) on Tue, 09 Mar 1999 08:00:00 GMT
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Jon Kimber
DERA
ENGLAND

Subject: Re: AND statements

Posted by [Craig Markwardt](#) on Wed, 10 Mar 1999 08:00:00 GMT

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rmlongfield@my-dejanews.com writes:

>
>
> Hi Jon, Please don't feel bad if you don't think people are using
> your programs. I've been hanging around this newsgroup for almost a year now
> and I've collected quite a lot of programs and web pages. Some I use, some
> not. I do use pointers frequently and even worse, pointers to pointers. When
> I've got a problem, I first search the Deja-News archives for this group for
> a solution. I may not use your program now but I did have a look at it and I
> know where it is for when and if I need it in the future.
>
> I do appreciate the sharing of tricks and ideas about how to
> handle certain problems.
> Rose

Here is what I have seen from my personal experience, based on my IDL web page:

Number of IDL page hits per month - about 450
Number of program downloads per month - about 250
Number of feedback messages per month - about 1

So, to Phil: there may be a lot of people using your program but you won't necessarily know about it. Feedback ratios seem to be less than 1%. Consider that: (a) only a fraction of people will download your code; (b) a fraction of them will try to use it; (c) a fraction of them will use it successfully; and (d) a fraction of them will then be motivated to respond to the author.

Advertisement is also key. I see a noticeable increase in hits when I mention my web page here on the newsgroup, based on informal polling.

To users of contributed software: feedback is always welcome! Whether it's a bug report, a feature request, or a "thank you", I am sure that the David's, Liam's, Phil's appreciate the interaction and knowing that they don't live in a vacuum.

Craig

P.S. My IDL web page is <http://astrog.physics.wisc.edu/~craigm/idl/idl.html>

--

Craig B. Markwardt, Ph.D. EMAIL: craigmnet@astrog.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response

Subject: Re: AND statements
Posted by [philaldis](#) on Wed, 10 Mar 1999 08:00:00 GMT
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On Wed, 10 Mar 1999 10:41:44 GMT, rmlongfield@my-dejanews.com wrote:

> Jon Kimber wrote:

Well, actually Phil Aldis wrote...but Phil Aldis also forgot to change the signature file so that he was given the signature file that someone else had been using.

>

> Hi Jon, Please don't feel bad if you don't think people are using
> your programs. I've been hanging around this newsgroup for almost a year now
> and I've collected quite a lot of programs and web pages. Some I use, some
> not. I do use pointers frequently and even worse, pointers to pointers. When
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> know where it is for when and if I need it in the future.

>

> I do appreciate the sharing of tricks and ideas about how to handle certain
> problems.

> Rose

Thank you, that makes me feel a bit better anyway. Maybe I feel spurred on to tackle the general pupose structure editor now,
Cheers,
PHIL ALDIS

Subject: Re: AND statements
Posted by [rmlongfield](#) on Wed, 10 Mar 1999 08:00:00 GMT
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Jon Kimber wrote:

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> DERA

> ENGLAND

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Rose

-----== Posted via Deja News, The Discussion Network ==-----
<http://www.dejanews.com/> Search, Read, Discuss, or Start Your Own

Subject: Re: AND statements

Posted by [Craig Markwardt](#) on Fri, 12 Mar 1999 08:00:00 GMT

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Kirmanta de Malher <fernandez-j2@chu-caen.fr> writes:

>

> Craig Markwardt wrote:

>

>> To users of contributed software: feedback is always welcome! Whether
>> it's a bug report, a feature request, or a "thank you", I am sure that
>> the David's, Liam's, Phil's appreciate the interaction and knowing
>> that they don't live in a vacuum.

>>

>>

>

> Oh well Craig, i thank you again for your programs. Do you plan to compile your
> mpfit program in C ? I would want to have more speed :) Bye, Jesus

>

Hmmm. I translated the curve-fitting program MPFIT from the fortran package called MINPACK. There is also a C version available (check Netlib). As for interfacing IDL and C, that gets a little sticky. Since I use MPFIT, I'll certainly keep trying to improve it as I can, including speeding it up.

Craig

P.S. MPFIT is available from

<http://astrog.physics.wisc.edu/~craigm/idl/idl.html>

--

Craig B. Markwardt, Ph.D. EMAIL: craigmnet@astrog.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response

Subject: Re: AND statements
Posted by [davidf](#) on Fri, 12 Mar 1999 08:00:00 GMT
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Kirmanta de Malher (fernandez-j2@chu-caen.fr) writes:

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>
> Oh well Craig, i thank you again for your programs. Do you plan to compile your
> mpfit program in C ? I would want to have more speed :)

Well, now. Here is why feedback is a double-edged sword. :-)

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438 E-Mail: davidf@dfanning.com
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: AND statements
Posted by [Kirmanta de Malher](#) on Fri, 12 Mar 1999 08:00:00 GMT
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Oh well Craig, i thank you again for your programs. Do you plan to compile your
mpfit program in C ? I would want to have more speed :) Bye, Jesus

--

```
+-----+
|               |
| Jesus Fernandez |
| Unite IRM du CHU de Caen |
| Avenue de la cote de nacre |
| 14033 Caen      |
| France          |
|               |
+-----+
```