
Subject: IDL Question - Opposite of WHERE?
Posted by [suicidal_10](#) on Wed, 11 Jun 2003 22:28:33 GMT
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is there a command that does the opposite of the WHERE command?
Instead of returning the indices of elements that satisfy a condition,
it returns the ones that don't satisfy it

any idea how i can do that?

Subject: Re: IDL Question - Opposite of WHERE?
Posted by [James Kuyper](#) on Wed, 11 Jun 2003 22:51:25 GMT
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zygnus wrote:

>
> is there a command that does the opposite of the WHERE command?
> Instead of returning the indices of elements that satisfy a condition,
> it returns the ones that don't satisfy it
>
> any idea how i can do that?

Instead of where(x eq 4), just use where(x ne 4). There's a
corresponding way to re-write any condition, to become its reverse. And
of course, there's always the brute-force method of reversing your
condition with the NOT operator, but I find that a less elegant
solution.

Subject: Re: IDL Question - Opposite of WHERE?
Posted by [Chad Bender](#) on Wed, 11 Jun 2003 23:41:08 GMT
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zygnus <suicidal_10@yahoo.com> wrote:
: is there a command that does the opposite of the WHERE command?
: Instead of returning the indices of elements that satisfy a condition,
: it returns the ones that don't satisfy it

Try using the 'COMPLEMENT' keyword with where. It should return
an array containing the elements not returned in the result output.

Chad Bender

Subject: Re: IDL Question - Opposite of WHERE?
Posted by [Mark Hadfield](#) on Thu, 12 Jun 2003 00:25:25 GMT
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"James Kuyper" <kuyper@saicmodis.com> wrote in message
news:3EE7B26D.AD5E4A35@saicmodis.com...

> Instead of where(x eq 4), just use where(x ne 4). There's a
> corresponding way to re-write any condition, to become it's reverse. And
> of course, there's always the brute-force method of reversing your
> condition with the NOT operator, but I find that a less elegant
> solution.

Not to mention the fact that NOT does *not* work as expected with WHERE. See

http://www.dfanning.com/code_tips/bitwiselogical.html

--

Mark Hadfield "Ka puwaha te tai nei, Hoesa tatou"
m.hadfield@niwa.co.nz
National Institute for Water and Atmospheric Research (NIWA)

Subject: Re: IDL Question - Opposite of WHERE?
Posted by [Craig Markwardt](#) on Thu, 12 Jun 2003 01:21:19 GMT
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Chad Bender <cbender@hapuna.ess.sunysb.edu> writes:

> zygnus <suicidal_10@yahoo.com> wrote:
> : is there a command that does the opposite of the WHERE command?
> : Instead of returning the indices of elements that satisfy a condition,
> : it returns the ones that don't satisfy it
>
> Try using the 'COMPLEMENT' keyword with where. It should return
> an array containing the elements not returned in the result output.

Adding my tidbit:

COMPLEMENT is really useful when you want to know the indices of
both the true and the false values of your selection. If you just
want the false values, then as James said, you can simply negate the
selection expression.

Craig

--

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

Subject: Re: IDL Question - Opposite of WHERE?
Posted by [R.G. Stockwell](#) on Thu, 12 Jun 2003 11:37:13 GMT
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"Craig Markwardt" <craigmnet@cow.physics.wisc.edu> wrote in message
news:onvfvcrsz4.fsf@cow.physics.wisc.edu...

>
> Chad Bender <cbender@hapuna.ess.sunysb.edu> writes:
>> zygnus <suicidal_10@yahoo.com> wrote:
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>
> Craig
>
> --
> -----
> Craig B. Markwardt, Ph.D. EMAIL: craigmnet@cow.physics.wisc.edu
> Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
> -----

The WHERE function is quite useful, but often I find myself really needing
a WHY function. And of course, it's opposite, the WHYNOT function.

-bob

Subject: Re: IDL Question - Opposite of WHERE?
Posted by [David Fanning](#) on Thu, 12 Jun 2003 14:26:20 GMT
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R.G. Stockwell writes:

> The WHERE function is quite useful, but often I find myself really needing

> a WHY function.

Yes, I notice this is conspicuously absent in the new IDL 6.0 version, too, where I find myself wishing for it a LOT! :-)

Cheers,

David

--

David W. Fanning, Ph.D.

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

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