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 indeces of elements that satisfy a condition, it returns the ones that dont 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 View Forum Message <> Reply to Message

zygnus wrote:

>

- > is there a command that does the opposite of the WHERE command?
- > Instead of returning the indeces of elements that satisfy a condition,
- > it returns the ones that dont 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 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.

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 indeces of elements that satisfy a condition,
- : it returns the ones that dont 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, Hoea 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 View Forum Message <> Reply to Message

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 indeces of elements that satisfy a condition,
- > : it returns the ones that dont 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.

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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 View Forum Message <> Reply to Message

"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: >> : is there a command that does the opposite of the WHERE command? >> : Instead of returning the indeces of elements that satisfy a condition, >> : it returns the ones that dont 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

The WHERE function is guite 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 View Forum Message <> Reply to Message

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

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David W. Fanning, Ph.D.

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

Toll-Free IDL Book Orders: 1-888-461-0155