
Subject: Re: Array definition

Posted by [Bob\[3\]](#) on Wed, 08 Aug 2007 17:15:56 GMT

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On Aug 8, 1:00 pm, Melanie <mkjone...@gmail.com> wrote:

> Any ideas? Please let me know if this question is not clear...

Look at the WHERE command.

Subject: Re: Array definition

Posted by [yp](#) on Wed, 08 Aug 2007 17:18:09 GMT

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On Aug 8, 6:00 pm, Melanie <mkjone...@gmail.com> wrote:

> Hi,

> I am trying to check an array of about 19000 elements for values that
> are above a certain value. I then want to save only the index of the
> larger values in a new array.

avoid FOR loop, use WHERE

indices = where(array GT value, n_wh)

>

> So, I am going through the original array with a for loop and checking
> if each value is greater than 19:
> for i=0, nelements-1 do begin
> if (array1[i] gt 19) then...

>

> Next, if the value in array1 is in fact greater than 19, I want to
> save the value of i into a new array such as

>

> if(array1[i] gt 19) then array2[...]=i

>

> But I'm not sure how to make this work such that I can write each
> subsequent i value for which the value in array1 is gt 19 into each
> subsequent space in array2...

>

> Any ideas? Please let me know if this question is not clear...

Subject: Re: Array definition

Posted by [Conor](#) on Wed, 08 Aug 2007 17:38:34 GMT

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On Aug 8, 1:18 pm, Yaswant Pradhan <Yaswant.Prad...@gmail.com> wrote:

> On Aug 8, 6:00 pm, Melanie <mkjone...@gmail.com> wrote:

```

>
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>> I am trying to check an array of about 19000 elements for values that
>> are above a certain value. I then want to save only the index of the
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>> But I'm not sure how to make this work such that I can write each
>> subsequent i value for which the value in array1 is gt 19 into each
>> subsequent space in array2...
>
>> Any ideas? Please let me know if this question is not clear...

```

specifically:

```

array_size = size(array1, /dimensions)
array2 = fltarr(array_size)
w = where( array1 gt value, c )
if c gt 0 then array2[w] = array1[w]

```

Subject: Re: Array definition
 Posted by [Bob\[3\]](#) on Wed, 08 Aug 2007 17:53:20 GMT
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On Aug 8, 1:38 pm, Conor <cmanc...@gmail.com> wrote:
 > On Aug 8, 1:18 pm, Yaswant Pradhan <Yaswant.Prad...@gmail.com> wrote:
 >> avoid FOR loop, use WHERE
 >> indices = where(array GT value, n_wh)
 >
 > specifically:
 >
 > array_size = size(array1, /dimensions)
 > array2 = fltarr(array_size)

```
> w = where( array1 gt value, c )  
> if c gt 0 then array2[w] = array1[w]
```

w will be an array of the indices, sized to the number of elements of array1 gt value (given by c), which is what Melanie was looking for afaict.

array2 will be the same size as array1, but will have masked out any elements le value. (mask should be 0.0).
