
Subject: Re: Sorting (big) int array: Eliminate for loop
Posted by [Brian Larsen](#) on Mon, 21 Sep 2009 15:29:32 GMT
[View Forum Message](#) <> [Reply to Message](#)

I think this is a use for `value_locate`. But there are lots of caveats. Like A would have to be sorted which is possibly a speed hit. Are all the numbers unique? If not then `B[elements]=A` could have more than one answer, which could be bad.

Read through the `value_locate` help and see if it can work for your application.

Cheers,

Brian

Brian Larsen
Boston University
Center for Space Physics

Subject: Re: Sorting (big) int array: Eliminate for loop
Posted by [greg.addr](#) on Mon, 21 Sep 2009 15:37:18 GMT
[View Forum Message](#) <> [Reply to Message](#)

How about this...

```
pro test
a=['I','E','F','D','A','J','C','B','G','H']
b=['E','B','I','J','D','A','C','H','F','G']
```

```
qa=sort(a)
qb=sort(b)
qa2=sort(qa)
elements=qb[qa2]
```

```
print,b[elements]
end
```

```
IDL> test
I E F D A J C B G H
```

Sorting the sorted indices is the trick. I think it's right, but it makes my head hurt anyway.

regards,

Greg

Subject: Re: Sorting (big) int array: Eliminate for loop

Posted by [Luds](#) on Tue, 22 Sep 2009 12:15:55 GMT

[View Forum Message](#) <> [Reply to Message](#)

On Sep 21, 5:37 pm, greg <greg.a...@googlemail.com> wrote:

> How about this...

>

> pro test

> a=['I','E','F','D','A','J','C','B','G','H']

> b=['E','B','I','J','D','A','C','H','F','G']

>

> qa=sort(a)

> qb=sort(b)

> qa2=sort(qa)

> elements=qb[qa2]

>

> print,b[elements]

> end

>

> IDL> test

> I E F D A J C B G H

>

> Sorting the sorted indices is the trick. I think it's right, but it

> makes my head hurt anyway.

>

> regards,

> Greg

Perfect, thanks. This works great. Having to do a couple sorts doesn't add too much overhead to my code. It's much faster now.

By the looks of it the `value_locate` function could do the trick too, but it seems to want one of the arrays sorted anyway, which isn't the case for me.

Thanks for the advice guys. Very helpful.

A
