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Subject: Re: Getting rid of loops  
Posted by [davidf](#) on Thu, 17 Feb 2000 08:00:00 GMT  
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Mark Hadfield (m.hadfield@niwa.cri.nz) writes:

```
> The UNIQ function, along with the SORT function, will do this:
>
>   print, UNIQ(cycles, SORT(cycles))
>
> or if you know that your array is already monotonic, just:
>
>   print, UNIQ(cycles)
```

Uh, actually:

```
   print, cycles(UNIQ(cycles))
```

But we know what you mean. :-)

Cheers,

David

--

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>  
Toll-Free IDL Book Orders: 1-888-461-0155

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Subject: Re: Getting rid of loops  
Posted by [Michael Asten](#) on Fri, 18 Feb 2000 08:00:00 GMT  
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Try this.  
Good luck,  
Michael Asten

```
function fn,cycles
  cycles_and=[cycles,max(cycles)]
  cycles_shift=[cycles[0],cycles]
  print , cycles_and
  print , cycles_shift
  b=where(cycles gt cycles_shift)
  sub_cycles=[ cycles_shift[b[0]], cycles_and[b] ]
  return,sub_cycles
```

end

```
cycles=[2,2,2,2,2,6,6,7,7,7,9,9,9,27,27,27]
print,fn(cycles)
;[2,6,7,9,27]>
end
```

Jacob Noel-Storr wrote:

```
> I am trying to create non-loopy IDL code for a project I am working on.
>
> I have a very long list of integers ('cycle numbers') and I need some way of
> creating an array that consists of just the cycle numbers. For example if I
> had:
>
>> cycles=[2,2,2,2,2,6,6,7,7,7,9,9,9,27,27,27]
>
> then I would want a function which would do this kind of thing:
>
>> print,fn(cycles)
> [2,6,7,9,27]
>
> At the moment this is done by looping through the data twice. Once to count
> how many different values there are and once to write the different values
> into an array.
>
> Any suggestions about how this could be achieved without the two 'for'
> loops?
>
> Thanks,
> Jacob
>
> --
> Jacob Noel-Storr
> Astronomy Department
> Columbia University / Biosphere 2 Center
> www.astro.bio2.edu/jacob/
> jake@astro.columbia.edu
```

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Subject: Re: Getting rid of loops  
Posted by [Mark Hadfield](#) on Fri, 18 Feb 2000 08:00:00 GMT  
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Jacob Noel-Storr <jake@astro.columbia.edu> wrote in message  
news:88i60t\$477\$1@newsmaster.cc.columbia.edu...

> ..

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> [2,6,7,9,27]
```

The UNIQ function, along with the SORT function, will do this:

```
print, UNIQ(cycles, SORT(cycles))
```

or if you know that your array is already monotonic, just:

```
print, UNIQ(cycles)
```

---

Mark Hadfield  
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