Subject: Re: Filling an array
Posted by Pavel A. Romashkin on Fri, 19 Jan 2001 00:43:55 GMT
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I knew it. What the heck will I write to the newsgroup the next time
for? I will just write directly to JD :-) I will give it a shot timing
wise tomorrow, but I am sure it will be faster.
This one was the last drop in the bucket. I am reading and practicing
with the darn Histogram thing tomorrow until I can write my entire code
with a long single call to Histogram.

Cheers,
Pavel

P.S. Lets just say (TM) that I tried to rig up Histogram for this, but
was distracted before I got too far. Not that I am saying I'd come up
with a solution, if I wasn't :-(

JD Smith wrote:
>
> "Pavel A. Romashkin" wrote:
>>
>> Thanks David and Craig. If Craig says "no", this means something.
>> Although I'd wait with the verdict until I hear from JD :-) After all,
>> the loop I have with Total, although it goes through all elements of B,
>> is taking only 0.03 s on my machine for B with ~2500 points converted to
>> C with ~50k points, which is acceptable since it is not executed many
>> times repeatedly. In contrast with looping using Replicate that was
>> taking 5.5 s :-(
>>
>> Cheers,
>> Pavel
>>
>> "Pavel A. Romashkin" wrote:
>>>
>>> If I have
>>>
>>> a = findgen(10)
>>> b = fix(100* randomu(10, 10))
>>> ; N_elements(a) is equal to n_elements(b)
>>> c = findgen(total(b))
>>>
>>> how can I fill C with values from A using B as a running index, so that
>>>
>>> c[0 : b[0]-1] = a[0]
>>> c[b[0] : b[0]+b[1]-1] = a[1]
>>>
>>> etc, without looping through "n_elements(b)-1" iterations?

>>> I have a fast solution with a loop and indexing using total(/cumulative)
>>> and a very slow one with loop and replicate, but I can't come up with a
>>> loop-free one.
>
> Despite the fact that getting a job and writing a thesis should be my
> foremost priorities....
>
>   tmp=histogram(total(b,/CUMULATIVE)-1,/BINSIZE,MIN=0,REVERSE_ INDICES=ri)
> c=a[ri[0:n_elements(ri)-n_elements(b)-2]-ri[0]]
>
> JD
>
> P.S. Let's just say (TM) we all knew it had to use histogram.
>
> P.P.S. A loop free solution is not guaranteed to be fastest in all
> cases.   It *is* guaranteed to elicit various
> histogram/median/rebin/reform/## curses from newsgroup readers.