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Subject: Re: Vectorization question

Posted by [promashkin](#) on Tue, 12 Sep 2000 19:34:51 GMT

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Hi Liam,

I came up with a different approach. For short arrays in a loop, it is 3 times slower than your method, Liam. However, with A being 1,000,000 and both X and B 100,000 elements long, your method could not allocate memory on my machine, while mine ran in 0.07 s. Check out the code below. The loops were put in to get runtime estimates.

I run 5.3 on PowerMac G4, 192 MB total RAM, 64 MB allocated to IDL.

Cheers,

Pavel

```
pro pavel, a, b, x
out = a
start = systime(1)
;for i =0, 10000 do begin
ind = x[uniq(x, sort(x))]
loc = value_locate(x, ind)
sum_b = total(b, /cumulative)
res = [0, sum_b[loc], 0]
a_values = (res-shift(res, 1))[1:n_elements(res)-2]
out[ind] = a_values
;endfor
print, systime(1) - start
;print, out, format='(10i4)'
end
```

```
pro liam, a, b, x
out = a
start = systime(1)
;for i =0, 10000 do begin
tmp = intarr(n_elements(a), n_elements(x))
tmp[x, indgen(n_elements(x))] = b
out = a + total(tmp, 2)
;endfor
print, systime(1) - start
;print, out, format='(10i4)'
end
```

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