Subject: how to calculate a running total of a vector
Posted by VUKOVIC on Fri, 02 Dec 1994 17:51:46 GMT

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Suppose I have a vector v.
I want to generate a vector vv whose i-th element is a sum of the first i
elements of v. How to do it fast -- without loops?

I thought of multiplying a matrix with 1's on and bellow its diagonal by v.
That would do it, but seems like a bit of overkill.

Subject: Re: how to calculate a running total of a vector
Posted by chase on Fri, 02 Dec 1994 21:34:43 GMT

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In article <3bnmri$e91@news.doit.wisc.edu> VUKOVIC@uwmfe.neep.wisc.edu (Mirko Vukovic)
writes:

Mirko> Suppose I have a vector v. I want to generate a vector vv
Mirko> whose i-th element is a sum of the first i elements of v. How
Mirko> to do it fast -- without loops?

Mirko> I thought of multiplying a matrix with 1's on and bellow its
Mirko> diagonal by v. That would do it, but seems like a bit of
Mirko> overkill.

This will work, but it is overkill also. I probably does the same
amount of computations as your matrix multiply solution.

running_sum = (convol([0,v],replicate(1.,n_elements(v)),center=0,/edge_tru n))(1:*)

Chris Chase
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