Subject: Re: How can I integrate? (easy question?)
Posted by ramesh on Mon, 25 Mar 1991 17:33:17 GMT
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In article <1991Mar20.233728.1@csc.anu.edu.au> bdb112@csc.anu.edu.au writes:
> How can I efficiently do a running sum of a vector (integrate)? The explicitly
> coded version (IDL v2)
> for i=1,n-1 x(i)=x(i) + x(i-1) achieves the desired effect, but takes (VS3100)
> 1 second for a 2000 element array compared to .01 sec for z=x+x, a similar
> number of operations. This is such an obvious thing to do that I must be
> missing something obvious - I can't find it in the userlib either (just
> deriv).

Assuming "i" represents the current array index value upto which you want to sum the elements of the array "x", try:

```
sum_x = total(x(0:i))
```

or a variation thereof. The dimension of array "sum_x" will be automatically dimensioned to the value contained in "i"

Note: Function "total" is a PV Wave system routine.

R.V.