On Sunday, March 25, 2012 5:22:00 AM UTC-4, IDL beginner wrote:
> Dear All,
>
> I have the following question. Let's say we have a vector A and matrix
> array B so that:
>
> A = [1, 2, 5, 2, 3]
>
> B = [[2, 4], [1, 9]]
>
> I want to multiply each element of the vector A with the matrix array
> B but WITHOUT using a FOR loop. Is that possible??? I need to do so in
> order to save execution time.
>
> The output result should be an array C with dimensions C[2, 2, 5, 1].

C = intarr(2,2,5,1)
C[0,0,*,*] = B[0,0]*A
C[0,1,*,*] = B[0,1]*A
C[1,0,*,*] = B[1,0]*A
C[1,1,*,*] = B[1,1]*A

Since there are only four elements, there are no FOR loops needed.

I suppose that you are trying to frame a more generic problem. My recommendation is at first, don't worry about whether you are using FOR loops or not. Make each iteration of the loop do as much work as possible, and you should be fine.

Craig