Subject: Re: Is it really more efficient to work with arrays than FOR loops? Posted by David Fanning on Thu, 23 Nov 2006 17:13:11 GMT

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## Alvin writes:

```
> I was wondering if it is really that more efficient to work with arrays
> (large ones that is). For example I have the following simple code,
> which takes about 30 min to run:
>
 FOR z=0L, 400 DO BEGIN
>
     FOR y=0L, 400 DO BEGIN
>
        FOR x=0L, 400 DO BEGIN
>
                     :a function of z
            fn=f(z)
>
            gn=f(z)
                    ;another function of z
>
            IF (f(z) * x + g(z) * y GE f(z) * g(z)) THEN BEGIN
>
                blah
>
                blah
>
               blah
>
            ENDIF
>
         ENDFOR
>
      ENDFOR
>
 ENDFOR
> Now if I tried to vectorize the above, would it do me any good in
> saving time and possibly memory? If I say something like f(z) # x +
> g(z) # y, where these are all vectors, I have a feeling that I am not
> covering all the possible combinations as the FOR loop above. Does
> anyone have any ideas, or suggestions?
 http://www.dfanning.com/code tips/slowloops.html
Cheers,
David
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")
```