
Subject: Re: Code optimization
Posted by [pgrigis](#) on Wed, 16 Feb 2011 20:51:56 GMT
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On Feb 16, 3:38 pm, kisCA <ki...@hotmail.com> wrote:

```
> Hi there,  
>  
> I am trying, if it's possible to write thes lines in matrix formalism  
> but it seems a bit tricky for me.  
>  
> FOR I=1,NUM DO BEGIN  
>     SUMI=0.  
>     FOR K=1,M1 DO BEGIN  
>         FOR J=1,M1 DO BEGIN  
>             SUMI=SUMI+COV(J-1,K-1)*CS(J-1,I-1)*CS(K-1,I-1)  
>         ENDFOR  
>     ENDFOR  
>     VAR_ALPHA(I-1)=SUMI*VAR_FACTOR(I-1)  
> ENDFOR  
>  
> Is anyone got an idea it will be welcome  
>  
> Cheers
```

Yeah, it looks like that doesn't really need loops...

First you want to replace the inner loop with a matrix multiplication of COV and CS - call the result R (make sure you get the row and columns in the proper order). Then you want to replace the K loop with `total(R*CS,1)`. Then you want to replace the I loop with a multiplication of the last result by `var_factor`.

Something along those lines should work...

Ciao,
Paolo

Ciao,
Paolo
