
Subject: Help optimizing the nested for loops

Posted by [Messon Gbah](#) on Thu, 24 Feb 2005 20:46:03 GMT

[View Forum Message](#) <> [Reply to Message](#)

Could some one help get rid of nested for loops in the following statements?

The original code was written in C and I'm trying to port it to IDL.

```
indx = indgen(n)
indx[0] = 3
index[3] = 0
array = dblarr(n,n)
alpha = dblarr(n,n)
beta = dblarr(n)
```

```
;Loop 1
trace = double(0.0)
for j=0, n-1 do begin
    vj = indx[j]
    trace += alpha[vj,vj]
    alpha[vj,vj] += flamda ;flamda = a constant
    for k=0,j do alpha[vj,indx[k]] = alpha[indx[k],vj]
endfor
```

```
;Loop 2
for j=0, n-1 do begin
    vj = indx[j]
    for k=0,n-1 do array[indx[k],j] =
alpha[indx[k],vj]/sqrt(alpha[vj,vj]*alpha[indx[k],indx[k]])
endfor
```

```
;Loop 3
for j=0, n-1 do begin
    vj = indx[j]
    b[vj] = T[vj] ;T is some init value
    for k=0, n-1 do begin
        vk = indx[k]
        b[vj] += beta[vk]*array[k,j]/sqrt(alpha[vj,vj]*alpha[vk,vk])
    endfor
endfor
```