
Subject: Re: vectorization challenge! (help!)
Posted by [Maarten\[1\]](#) on Thu, 19 Jul 2007 08:35:50 GMT
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On Jul 17, 4:52 pm, Conor <cmanc...@gmail.com> wrote:

```
> n = 24
> npeeps = 50
> gn1 = findgen(n,npeeps)
> gn2 = findgen(n,npeeps)
> cutoff = .01
>
> for i=0,npeeps-1 do begin
>
>     ; make a random value to determine if we do anything with this
> row
>     if randomu(seed,1) lt cutoff then begin
>
>         ; this row has been selected. Swap the last (random number)
> of digits in gn1[:,i] with gn2[:,i]
>         randindex = long(randomu(seed,1)*n*nd)
>         temp = gn1[randindex:*,i]
>         gn1[randindex:*,i] = gn2[randindex:*,i]
>         gn2[randindex:*,i] = temp
>
>     endif
>
> endfor
```

I don't think you can get rid of the for loop, but you can get rid of the if statement, and shorten the for loop by using

```
ran_levels = randu(seed,npeeps)
idx = where(ran_levels lt cutoff, cnt)
for i=0,cnt-1 do
    randindex = long(randomu(seed,1)*n*nd)
    temp = gn1[randindex:*,idx[i]]
    gn1[randindex:*,idx[i]] = gn2[randindex:*,idx[i]]
    gn2[randindex:*,idx[i]] = temp
endfor
```

> From here you may be able to use the tricks listed in
http://www.dfanning.com/code_tips/drizzling.html

Hope this helps.

Maarten
