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Subject: Re: how to create a loop?

Posted by [R.G. Stockwell](#) on Thu, 11 Mar 2004 15:34:37 GMT

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"Thomas Nehls" <thomas.nehls@tu-berlin.de> wrote in message  
news:c2pveg\$P24\$1@mamenchi.zrz.TU-Berlin.DE...

> Hi,

>

> I want to create a loop, in which an array is filled pixel by pixel.

> Like this  $a(n) = a(n-1) + C*d$

>

> I tried this

>

> new = indgen(3,400,400)

> runner= indgen(3,400,400)

>

> FOR g= 0,255 DO BEGIN

> grey = imageA[2,\*,\*] eq g ; so grey is my mask, containing the greylevel

>

> FOR j=0,2 DO BEGIN

> new[j,\*,\*] = runner[j,\*,\*] + imageB[j,\*,\*]\*grey ; Image B contains

> the colors I want to employ

> new = runner

> ENDFOR

> ENDFOR

>

> My questions: (i) is the runner appropriate to do what I want or are

> there better ways to do this?

> (ii) is the "+" the right way to fill the array pixel by pixel?

>

> The results were not very exciting, I got a grey diagonal striped image...

> Thank you very much

> Tom

>

Hi Tom,

your line of new = runner is merely erasing any results,  
and the equivalent of what you are doing in the lines above  
can be written much shorter as follows:

```
runner= indgen(3,400,400)
```

So yes, you get a diagonal striped image in runner.

Other than that I'm not sure what you are trying to do.

To fill an array "Like this  $a(n) = a(n-1) + C*d$ "

; fist allocate "a" of size "npoints"

```
a = fltarr(npoints)
a[0] = c*d ; guessing a starting point
for i =1,npoints-1 do begin
    a[i] = a[i-1] + c*d
endfor
```

This could (should!) be vectorized which would be much quicker, but perhaps that is a later lesson.

Cheers,  
bob

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