
Subject: Re: Setting values in an array without usings loops
Posted by [Nancy W. Pearson](#) on Fri, 25 Jul 2003 14:47:43 GMT
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Johan Marais wrote:

```
> I want to create a circle consisting out of ones but without the use of for
> loops. here is how I do it with the loops. Anyone that can help?
>
> r = 33
> mask = intarr(2*r,2*r)
> for m=0,2*r-1 do begin
>   for n=0,2*r-1 do begin
>     if ((m-r)^2 + (n-r)^2) gt r^2 then mask[m,n] = 1
>   endfor
> endfor
```

```
IDL> m = shift(dist(2*r),r,r) gt r
```

TTFN,

David Grier

Subject: Re: Setting values in an array without usings loops
Posted by [R.G. Stockwell](#) on Fri, 25 Jul 2003 14:54:56 GMT
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"Johan Marais" <johan.marais@uz.kuleuven.ac.be> wrote in message
news:3f213af8_7@athenaneews.com...

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>   endfor
> endfor
```

Weehee, if one uses a little imaginaryation:

```
r = 33
m = (indgen(2*r)-r) # (intarr(2*r)+1)
n = (intarr(2*r)+1) # (indgen(2*r)-r)
bobbo=long(abs(complex(m,n))/r) eq 0
```

I would also add the following lines:

```
smilesize = 3
bobbo[r/2,r-smilesize:r+smilesize] = 0
bobbo[r/2+1,r-2*smilesize:r-smilesize] = 0
bobbo[r/2+1,r+smilesize:r+2*smilesize] = 0
bobbo[r/2+2,r-3*smilesize:r-2*smilesize] = 0
bobbo[r/2+2,r+2*smilesize:r+3*smilesize] = 0
bobbo[r/2+3,r-4*smilesize:r-3*smilesize] = 0
bobbo[r/2+3,r+3*smilesize:r+4*smilesize] = 0
bobbo[3*2*r/4,2*r/4] = 0
bobbo[3*2*r/4,3*2*r/4] = 0
surface,bobbo,az=89,ax=85
```

bwahahahahahahahahahahahahahahaha

Cheers,

-bob

Subject: Re: Setting values in an array without usings loops

Posted by [Johan Marais](#) on Fri, 25 Jul 2003 15:12:41 GMT

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Thanks, that works well!!

"Nancy W. Pearson" <pearson@elbereth.uchicago.edu> wrote in message
news:bfrfuj\$ppd\$1@bob.news.rcn.net...

> Johan Marais wrote:

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>> endfor

>> endfor

>

> IDL> m = shift(dist(2*r),r,r) gt r

>

> TTFN,

>

> David Grier

>

Subject: Re: Setting values in an array without usings loops

Posted by [R.G. Stockwell](#) on Fri, 25 Jul 2003 15:35:04 GMT

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"Nancy W. Pearson" <pearson@elbereth.uchicago.edu> wrote in message
news:bfrfuj\$ppd\$1@bob.news.rcn.net...

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>> endfor

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> IDL> m = shift(dist(2*r),r,r) gt r

Wheeeet! Illegal use of hidden "for loop"! 10 yard penalty and loss of
down.

:)

function dist....

for i=0L, m1/2 do begin ;Row loop

y = sqrt(x + i^2.) ;Euclidian distance

a[0,i] = y ;Insert the row

if i ne 0 then a[0, m1-i] = y ;Symmetrical

endfor

Cheers,
bob

PS

yeah, i suppose every array function has a "hidden for loop" if you look
deep enough.
