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Subject: Re: circles

Posted by [Joseph M Zawodny](#) on Thu, 10 Jul 1997 07:00:00 GMT

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lady of the elves wrote:

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>
> [incidentally, I'm new to this language :)]
>
> I'm trying to create a two-dimensional array, such that tvscl of the
> array will show a filled circle. So far, my best idea has not
> worked--but here it is:
>
> x and y are one-D arrays of 200 elements such that plot,x,y produces a
> circular shape, but not filled.
>
> for round1=0,199 do begin
>   for round2=0,199 do begin
>     if (y(round1) eq y(round2)) then begin
>       circle(y(round1),x(round1):x(round2))=2
>     endif
>   endfor
> endfor
>
> A circle is composed of boundary points such that: for each x, there are
> two y's and for each y, there are two x's--right? If I fill between the
> y's, I should have a circle....right?
>
> I would really like to have a circularly-filled array; if anyone has
> better knowledge, please let me know :)
> Thanks.
> -gzb
```

Select the center coordinates (xc,yc) for the circle in pixels (these need not be integers). If your array is (201,201) and you want the circle centered set the center values each to 100.

Select the radius of the circle in pixels (again, need not be integer).

For every element in the array (x,y) check to see if  $((x-xc)^2)+(y-yc)^2$  is less than or equal to the radius.

If it is, then set it to the "filled" value.

Naturally, this process can be done without loops.

Have fun,

JMZ

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