Subject: mandelbrot

Posted by oxfordenergyservices on Wed, 14 Apr 2010 11:49:16 GMT

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I was looking for a mandelbrot set generator for idl to show off idl to someone

I found this http://rosettacode.org/wiki/Mandelbrot_set#IDL but I remember seeing a more efficient version (just a few lines) once.

anybody got a mandelbrot set generator in the fewest lines?

Russ

Subject: Re: mandelbrot

Posted by pgrigis on Fri, 16 Apr 2010 14:25:28 GMT

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On Apr 16, 9:44 am, Dave Poreh <d.po...@gmail.com> wrote:
> On Apr 15, 7:16 am, Paolo <pgri...@gmail.com> wrote:
>
>
>> On Apr 15, 4:39 am, Dave Poreh <d.po...@gmail.com> wrote:
>>> On Apr 14, 8:20 am, Paolo <pgri...@gmail.com> wrote:
>>> On Apr 14, 7:49 am, a <oxfordenergyservi...@googlemail.com> wrote:
>>>> > I was looking for a mandelbrot set generator for idl to show off idl
>>>> > to someone
>>> > I found thishttp://rosettacode.org/wiki/Mandelbrot_set#IDLbutI
>>>> > remember seeing a more efficient version (just a few lines) once.
>>>> > anybody got a mandelbrot set generator in the fewest lines?
>>>> > Russ
>>>> This comes pretty close to a minimum set of commands:
>>> ;setup coordinates
>>> x=findgen(512)/511*4-2
>>> xx=x#(x*0+1)
>>> zz=complex(xx,transpose(xx))
>>>> CC=ZZ
```

```
>>> ;compute set for n=100 iterations
>>>> niter=100
>>> for i=0,niter-1 do zz=zz*zz+cc
>>> inside=where(abs(zz) LE 2,complement=outside)
>>>> ;this just for display
>>> mand=xx*0
>>>> mand[inside]=1
>>>> tvscl,mand
>
>>>> Ciao,
>>>> Paolo
>>> Any help with KOCH curve?
>> what have you tried? how did it fail?
>> Paolo
> I just want to know how we could produce it (KOCH curve) in IDL.
> Dave
```

You write a procedure that, given two points a and b returns 5 points a,x,y,z,b such that x is one third of the way from a to b, z is 2 thirds of the way, and y builds an equilateral triangle with x and z. When that is ready and working, you modify it to recursively call itself. It's pretty straightforward.

Ciao, Paolo