YAFG

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Contents

Chapter 1

YAFG

1.1 Yet Another Fractal Generator

A Set of Fractal Generators

I know you hate reading docs (so do I) so I'l be short :-)

Some boring info |-O - Copyright etc.

What the hell is it? - Set of fractal generators.

Will it run on my Amy? - You need 3.0+ and AGA Chipset.

How to install? - Simply run from CLI!

How to use it - Arguments and parameters.

Examples - Quick start.

Author - That's me :-).

1.2 Some boring info |-O

Some boring info |-O

These programs are all Public Domain. You can use them for free and copy them as long as no fee is charged (accept reasonable copy and/or media costs). This is also provided 'AS IS' without warranty of any kind. The author is not responsible for ANY damage or data loss the programs may cause.

If you make some interesting modifications please send me new versions and please, keep my name in source and docs :-) You don't need to send me any money (but if you want...), but an email to me will be nice of you.

1.3   What the hell is it?

What the hell is it?

This archive contains a few fractal generators. There are 3 drawers:

Mand2 - draws a Mandelbrot Set using z^2+c algorithm

Mand3 - draws a Mandelbrot Set using z^3+c algorithm

Julia - draws a Julia Set using z^3+c algorithm

The programs generate pictures in 256 greyscale. The color of each point is computed according to number of points inside a circle of radius 2 (linear) - the more points the darker the color is. I planned to add some coloring routine but it would take longer than program itself. So easier (and more comfortably) is to load picture in your favourite painting program and to set palette ranges in your way.

I didn't include any "save IFF" routine not because of lazyness - there are many screen grabbers out there so it's really not a problem (some of them doesn't grab 256 color screens correctly, so be carefull!). But I include source codes so you can improve it.

The programs have no GUI and they have to be run from CLI/Shell. But you can use this fact and write a batch file (script) that will generate fractals for you. You can for example make some animations this way but you need to compute parameters. It's not convinient but it's completely free!

Future:

I don't expect this program to make a revolution among fractal generators and I don't expect hundred of people sending me mails thanking Heavens for the program and running like hell to get newer versions. But if there are some people who'd like a *FREE* fractal generator I may think of adding GUI, save routine, other generating algorithms (Bifurcations, Lyapunov, Plasma, Clauds), non-linear coloring routines etc.

1.4   Will it run on my Amy?

Will it run on my Amy?

You need Kickstart 3.0+ and AGA Chipset.

The program computes fractals in up to 256 colors so I

needed AGA. There are many programs generating fractals in

16 colors so it's not a pitty for you if you don't have such

a configuration.

In each drawer you can find a few versions for different

processors and FPUs. Generally:

- program with plain filename will run on ANY procesor and

no FPU is needed,

- program which filename contains processor number is

optimized just for this processor,

- program which filename contains 'FP' requires a math

coprocessor

The program was created and tested on A1200 / HD / 6MB /

68882 / VGA.

If you want different version of compiled program let me

link Author} know.

1.5   How to install?

How to install?

Just copy main drawer "YAFG" where you like. All the

programs must be run from CLI or Shell and must be given

some arguments .

1.6   How to use it?

How to use it?

Program Mand2 and Mand3 needs 5 arguments: range to scan

parameter c (real parts of start and stop points and

imaginary parts of start and stop points) (arg. 1 to 4) and

number of iterations (arg. 5)

Program Julia3 needs 7 arguments: range for scan (real parts

of start and stop points and imaginary parts of start and

stop points) (arg. 1 to 4), real and imaginary part of

constant parameter c (arg 5 to 6) and number of iterations

(arg. 7).

Be carefull with number of iteration. If too small the
picture will be too dark, if too big the picture will be too
bright (even white).

IMPORTAINT!!!

To halt program during generating picture move mouse pointer
to top left corner of screen and wait till current line is
drawn. The same when program finishes. Sorry for such a
stupid thing, but it was the easiest. I'm so lazy...

See some examples .

1.7   Quick start

Quick start

Here are some interesting parameters. Try them out!

For Mand2:

mand2 -2 1 -1.5 1.5 70

mand2 -0.8823 -0.6476 -0.0171 0.2461 140

For Mand3:

mand3 -1.5 1.5 -1.5 1.5 50

mand3 0.1000 0.1080 0.7865 0.7925 130

mand3 0.1250 0.1310 0.7610 0.7670 200

mand3 0.4987 0.5005 0.4755 0.4773 300

mand3 0.4978 0.5008 0.0810 0.0840 200

For Julia3:

julia3 -1.4 1.4 -1.4 1.4 0.104945 0.788569 80

julia3 -1.4 1.4 -1.4 1.4 0.498760 0.082730 100

julia3 -1.4 1.4 -1.4 1.4 0.200000 0.751000 150

julia3 -1.4 1.4 -1.4 1.4 0.500000 0.475000 150

1.8   The Author

The Author

Send bug reports, thanks, bombs, money, good wine,
computers, turbo cards, legal and illegal programs, sport
cars (i'm fed up with other ones ;-)), and anything you can
imagine (and afford:-)) to:

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