

This is a very cool graphics demo that I wrote years ago, but few people have seen. I thought I would upload it to compuserve and stuff so that people could enjoy it.

To run the demo simply type DEMO. Press any key to stop the demo. This program makes a nice attract screen, just to get peoples attention.

The fractal mountain in this demo was grown by FRACINT.

NOTE TO COMPUTER PROGRAMMERS INTERESTED IN HOW THIS WAS DONE:

This graphics demo presents the power of precomputed tables. This demo is doing something which is computationally difficult. It takes a complete 2-dimensional graphics image and wraps it around a sphere in real-time. It also clips that sphere against a background. If you wrote a program to do this it would probably take about 2 minutes per frame to be drawn. However, if you look at the problem in a different way you can see the use and power of precomputed tables.

In that original 2-dimensional image, each x,y pixel is going to eventually be mapped to some x,y location on the screen. Even though the calculation in figuring out where it goes is involved, (involving a lot of trigonometry and floating point calculations), once you know where a particular x,y pixel goes, you really needn't calculate it again. Additionally some pixels don't map anywhere, including those that are masked against the background.

Now your problem is simpler, just write a program in BASIC, or C, or some other high level language, to compute where any given x,y pixel on the two dimensional image is going to end up, and then store the results to a file on disk. (In this demo the precomputed table is in the file SPHERE.TAB) Now obviously you need to write the playback code in assembly language. However, now the playback code is nothing more than scanning each x,y pixel in the source image, and plotting/or not plotting, to the destination screen location.

I hope you enjoy this graphics little ditty.

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