

## Project II

I have been learning how to program in the windows environment, and I have created the second project as a windows program. It is not an easy task, however, I have accomplished it. I had to go through greater trouble in making and thinking about the structure of the program than if I wanted to do it in DOS.

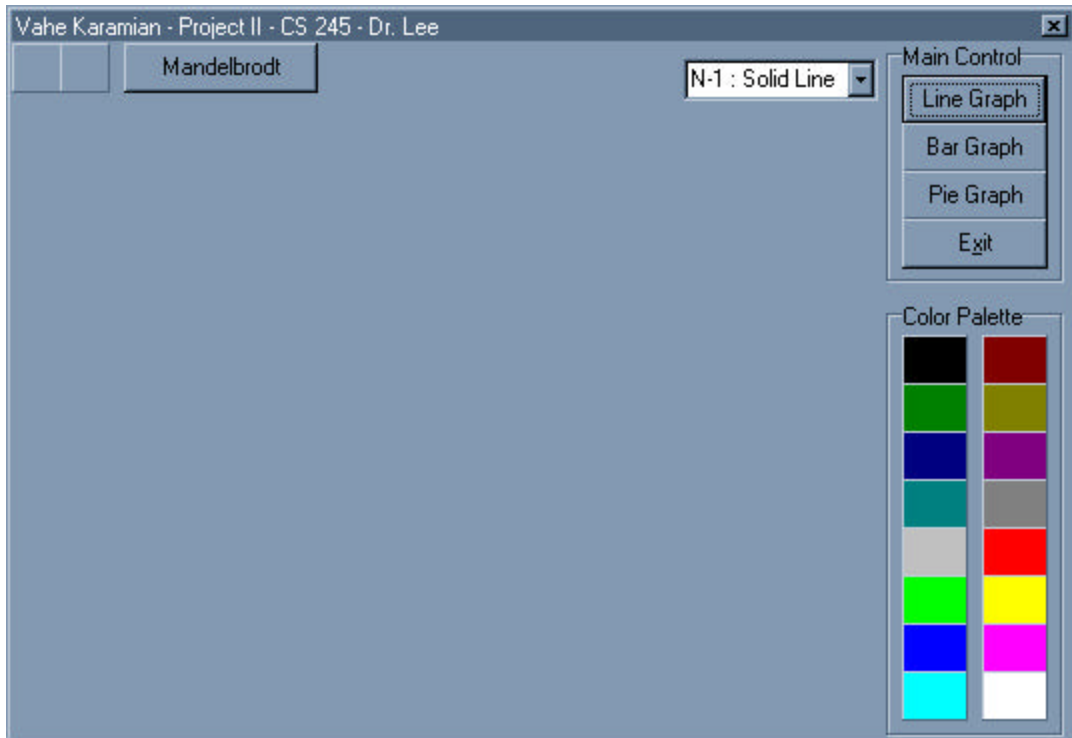
I have not however, made the program the best I could because of time, and I had to finish the project by Monday. However, if I had a little more time I would be able to make the program much useful and more interesting. I have implemented most of the functions that were required. I have used the DDA Algorithm to draw my lines, bars and as well as the slices of the pie chart. I have implemented the midpoint circle algorithm as well as the midpoint ellipse algorithm.

I have implemented my own line type function, as well as text output function. However, the text output function was not as easy to implement in Windows, as it would have been in the DOS environment.

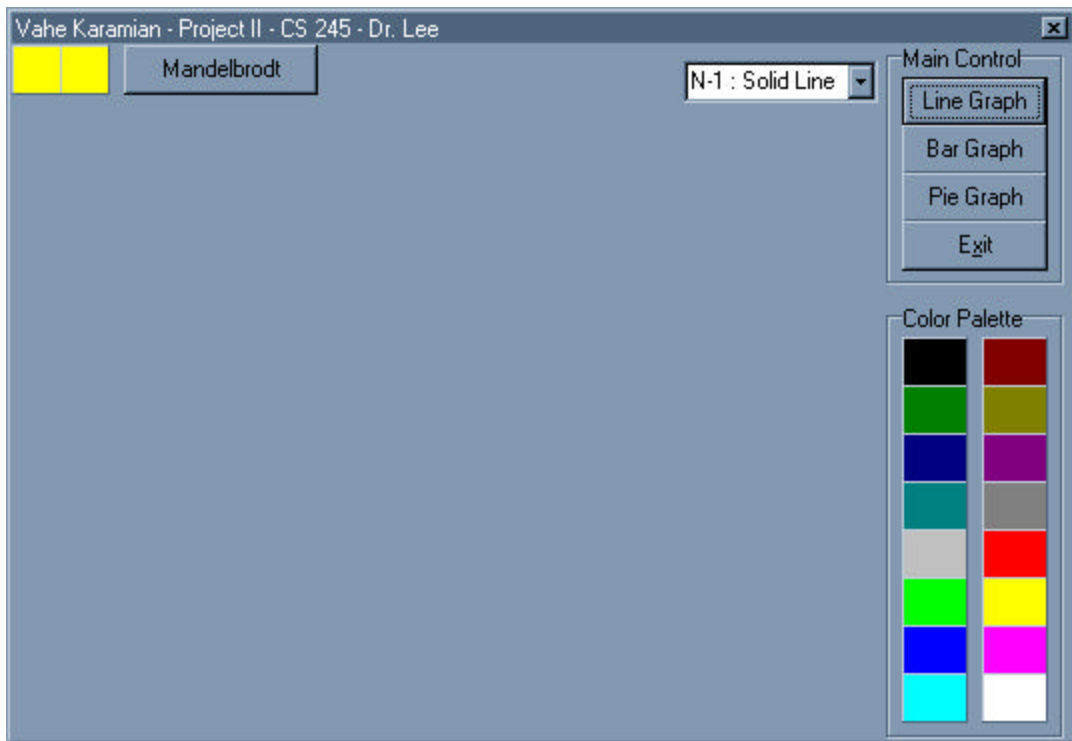
The Mandelbrot Set Diagram was the most interesting to implement, however, it took me quite some time to do it correctly, but the final result was well worth it.

In order to execute the program, we need some \*.dll files which I have included with the diskette. The files are for the same purpose as the **egavga.bgi** while programming with the Turbo C++ compiler. I have included a self extracting file on the disk which will take care of the files automatically. I have included a readme.txt file which will explain the files and where to extract them to.

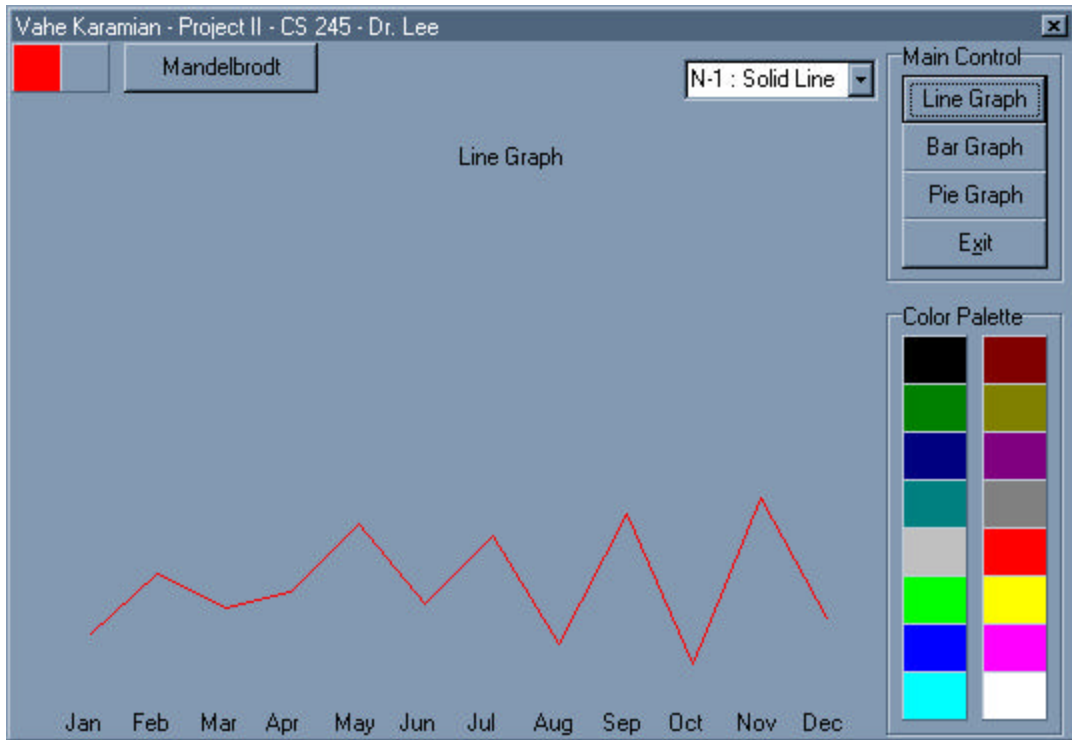
In the following pages you will find some of the screen shots of the program which I took while running the program. I hope you enjoy them.



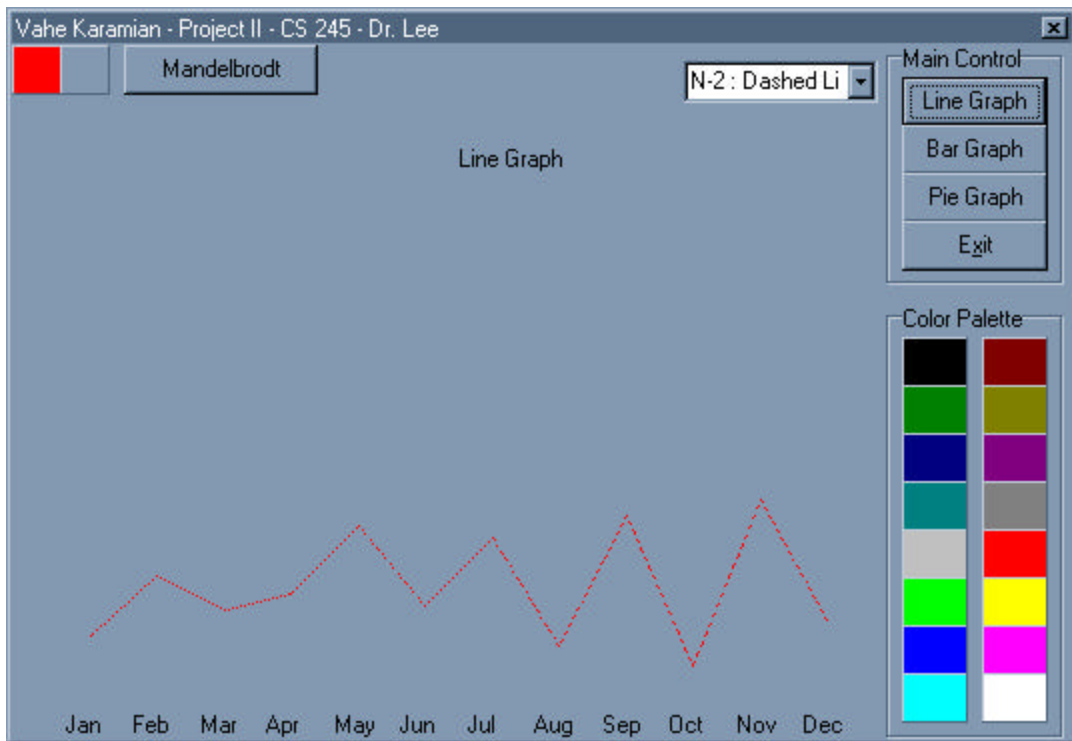
What you see when you start the program.



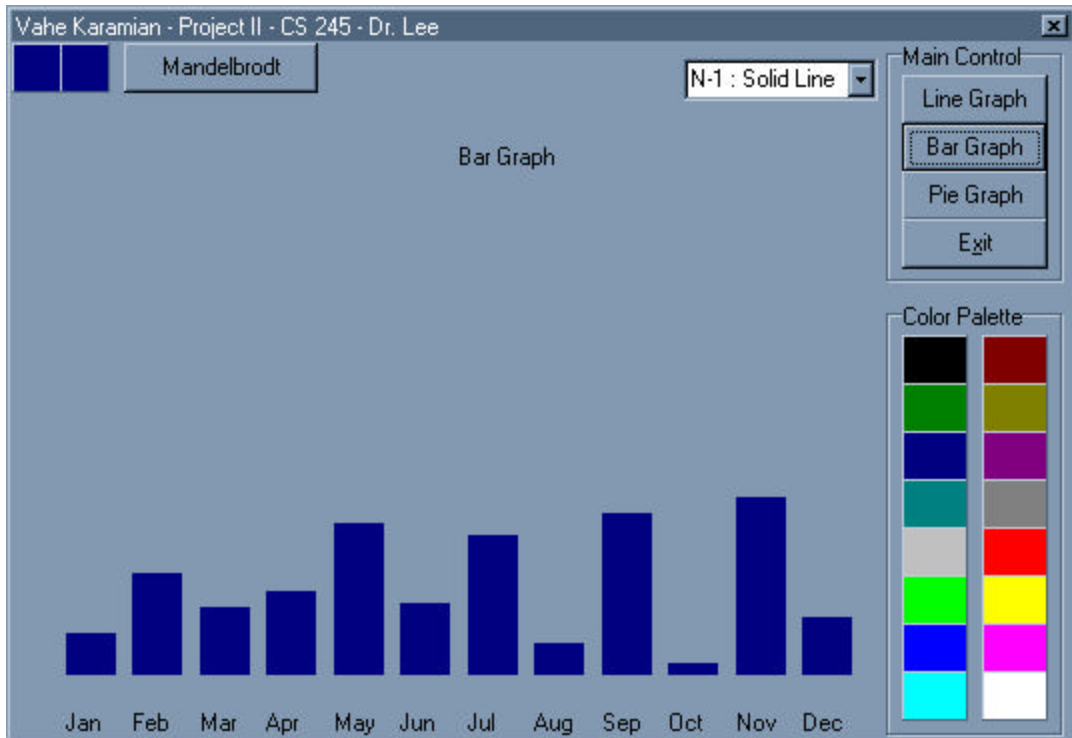
The squares at the top left had side show the color selection.



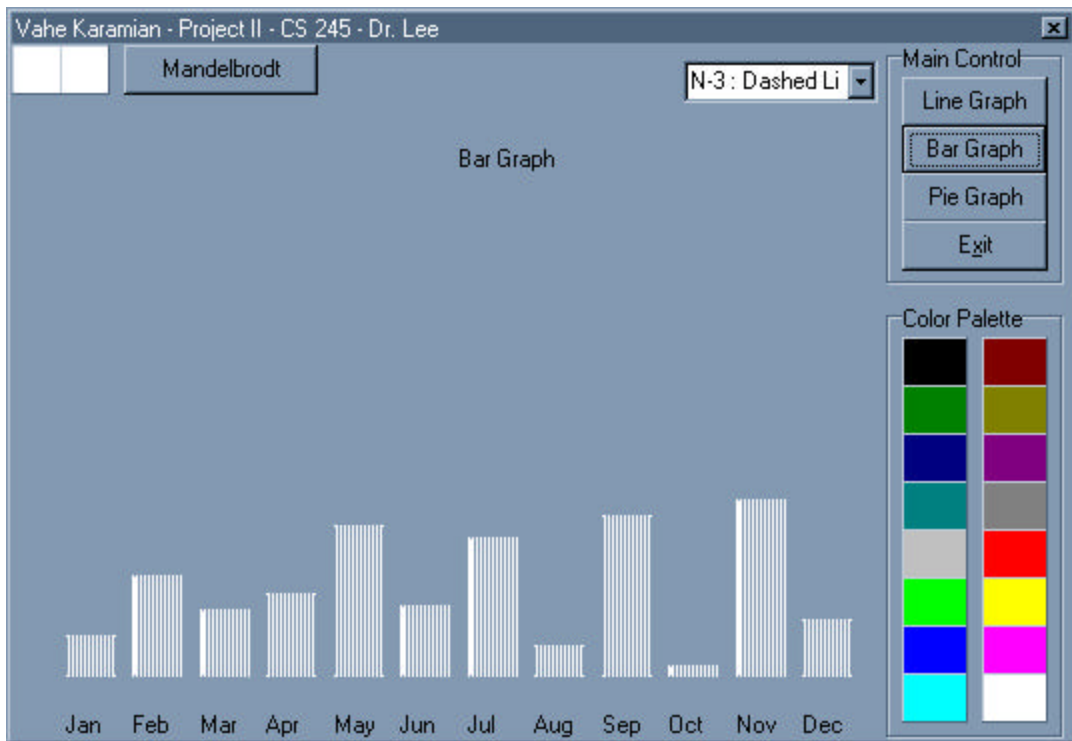
The line graph function with solid line.



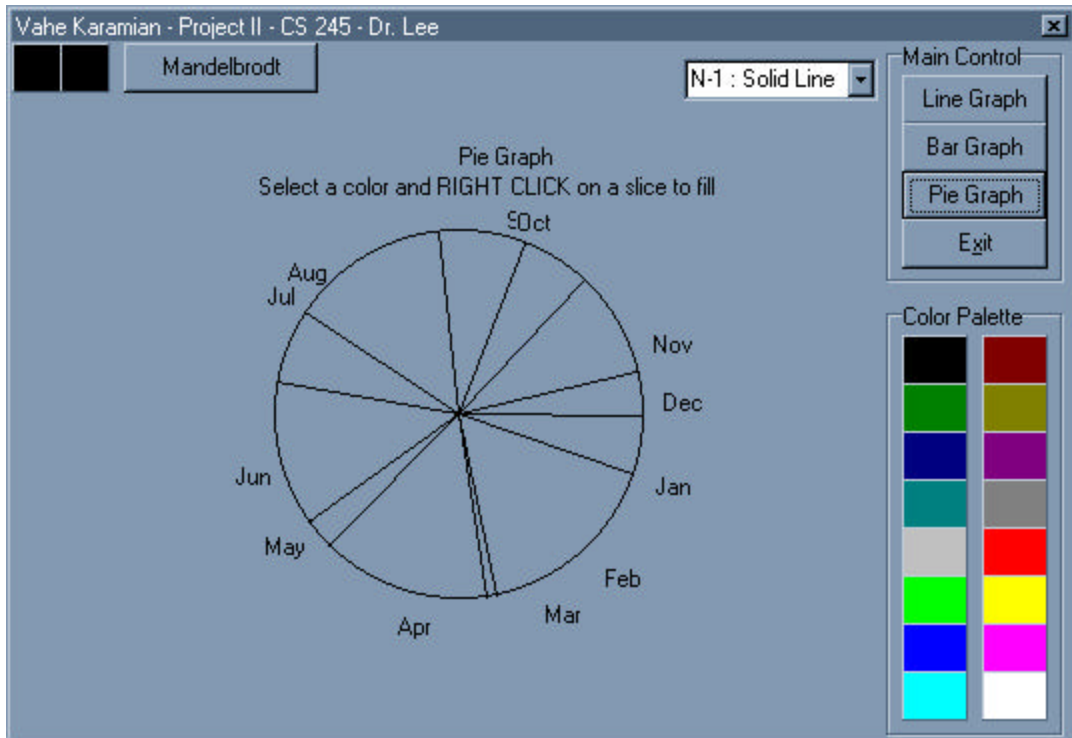
Same graph with dashed lines



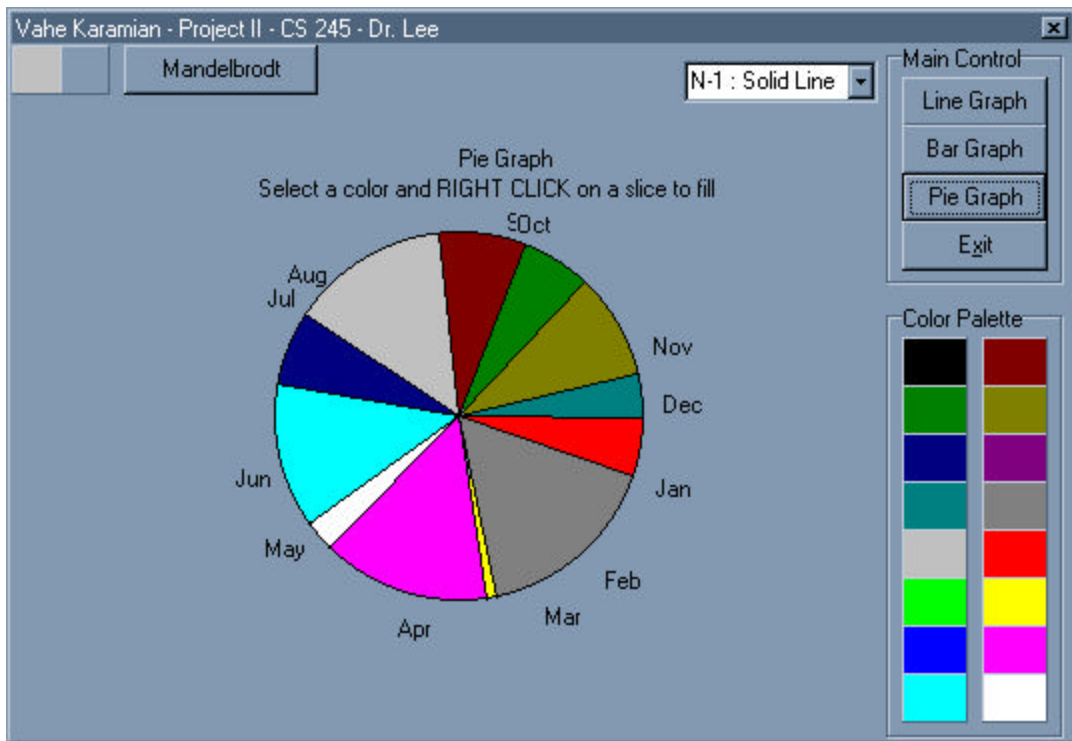
The Bar Graph.



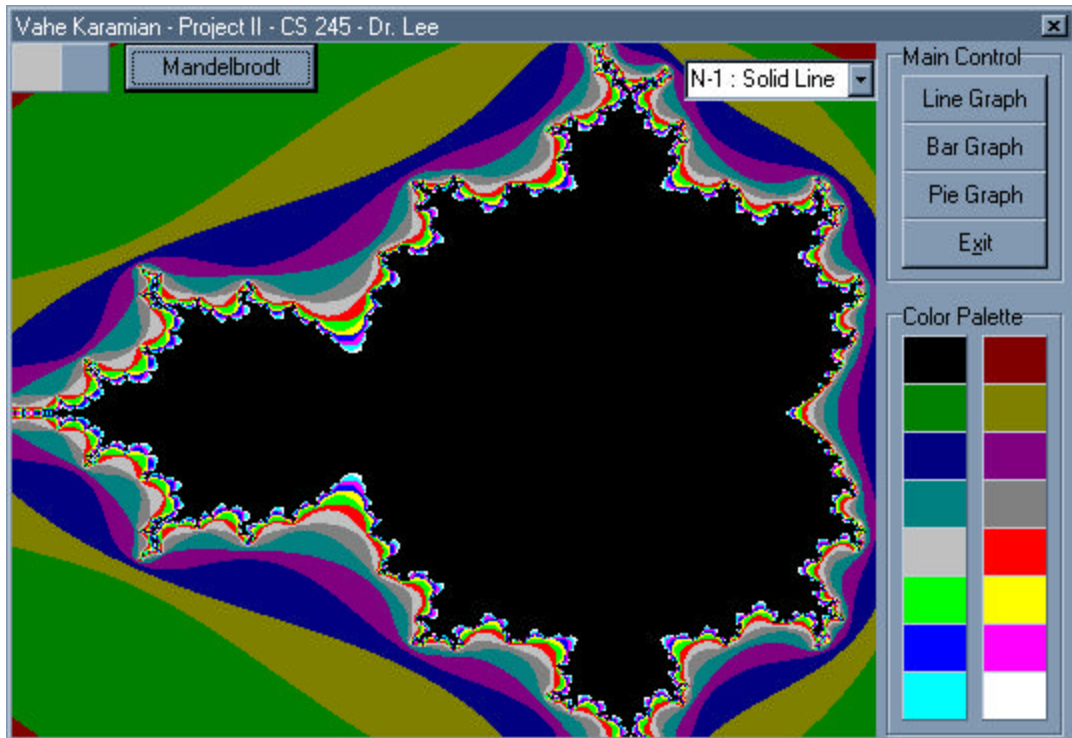
The Bar Graph with special fill function.



The Pie Chart.



Pie Chart with fill slices (Flood Fill function)



The Mandelbrot Set Diagram (pMin,pMax  $-1.6 \leftrightarrow 0.5$ ) (qMin, qMax,  $-1.1 \leftrightarrow 1.1$ )

I have learned a great deal of information on how to program in a windows environment. I wish I had more time to make the program nicer, and more useful.