HW5 Report

This program is available to view online with the following link:

https://peyton-somerville.github.io/CompGraphicsHW5/index.html

This program is fully functional except for a couple of small issues. The first issue is with drawing the midpoint line. I could not figure out how to get the midpoint line to work for all slopes. Currently it works for any slopes between magnitude -1 and 1. You can see this issue clearly when you draw a midpoint line with the slope being greater/less than 1/-1 with the primitive comparison on. The DDA line does not have this issue though, and works for any possible slope. The other issue is not really something wrong with my program, but it is just that HTML canvas does not have primitive hermite or b-spline curves. When drawing those curves with primitive comparison on, I just use the primitive bezier curve as the comparison, so the curves are not the same. This creates a cool effect with the hermite curve, because it mirrors the primitive curve, but the b-spline curve looks a little weird compared to the primitive curve.

Overall this program was not very difficult, since you gave us the functions in C, but it required a lot of code, so it took a while to complete. It was worth the time though, because the finished product is pretty fun to play with, as you can make more complex drawings by combining the shapes, lines, and curves. Enjoy the smiley face below made with this program :)