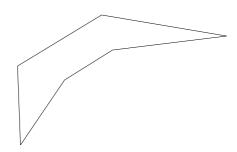
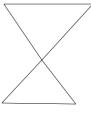
1. Write an OpenGL program that allows interactive creation of polygons via mouse input. That is, I click to create new vertices until I like the polygon, then make some indication (double click, right click, press a key, click a button; your choice) that I'm done, and the polygon is created.

NOTE: OpenGL does not handle concave or self-intersecting polygons properly. You do not need to worry about handling these either. (For example, if I click to create an hourglass figure like the one below, your program can draw a rectangle instead.)





Figure

2. Plot the function $\sin(z^2)$ as the complex variable z varies over a square mesh. Each value of z has real and imaginary component which maps into real and imaginary value of $\sin(z^2)$, that point should be plotted. (refer following figure)

