This assignment, worth 40 points, is due at 3pm, Friday, February 4. Submit it by attaching your modified files to an e-mail to cburch@cburch.com.

This assignment involves creating an animation conceptually similar to the wagon train example we saw in class, using two levels of animation. With the wagon train, the two levels are, first, the wagons motion across the screen, and, second, the wheels’ rotation on the moving wagons. You can choose any two-dimensional animation you like, as long as it involves at least two nested levels of motion. You should implement the two levels of motion using OpenGL’s matrix stack.

Some ideas of possible animations using levels of motion include the following.

- A hot-air balloon moving randomly around the window, carrying a person waving to the user.
- A helicopter moving around the window, with the rotors turning on the helicopter.
- A train chugging across the window with its steamstack emitting smoke moving upward.

You don’t need to follow any of these examples, though. Be creative!

A minimal well-written assignment fulfilling the assignment parameters using fairly sophisticated graphics, as with the wagon train code, will receive 85% of the possible points. The final 15% will be awarded based on the complexity/impressiveness/creativity of your animation.

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1If you want to download the wagon train code as a starting point for this assignment, you can do so through the class Web site’s Schedule page. Your code for drawing and motion, however, should be significantly different to satisfy the terms of this assignment.