I have recently been recommended videos such as <https://www.youtube.com/watch?v=kPRA0W1kECg> on YouTube, which are visualizations of various sorting algorithms in action. This is my primary motivation for choosing option 7 on the assignment sheet. I plan to produce a program that will animate a sorting algorithm. It will take input from the user for the upper bound of numbers to be sorted, and an array of natural numbers with the user-entered size will be randomly generated. The user can choose from a few options of sorting algorithms to use for the animation. Upon user activation, the process will begin; the sorting algorithm will proceed as usual, but its progress will be animated on the screen in the form of thin rectangles lined up left to right. The rectangles will all be of different height, corresponding to the magnitude of the numbers. After each swap, the rectangles whose associated numbers have moved will also swap positions and play a sound effect. Relevant information such as the process time and comparison counter will be shown on the screen. Each available sorting algorithm for the process will be implemented by myself and not taken from elsewhere, and as such may not be fully optimized.