The key to this puzzle is how you pick up the items. If you pick them up in order of 0 to 3, it will be easy to deposit them into the third pole and win the puzzle in one go. This is the sort of thing you could learn from playing the game multiple times.

Picking the items up in order is hard to do however. When it comes down to it, it’s just Tower of Henoi. So simply placing the items into a convenient order will suffice. It is possible to pick up the items in an order that will cause the puzzle to be unsolvable (if the items are acquired in the order of 0,1,2,3). However, you would have to go out of your way to accomplish this. So, it is unlikely it will happen. Consider it an obscure achievement. =P

I used the Queue class for collecting the items. This way they must be placed in a specific order (namely, the order in which they were picked up) It didn’t make sense to me to use a queue or a stack for the actual towers. The queue would simply not work because the last element onto the pole needs to be the first element off of the pole. The stack would not work for the poles because the user needs to know every element in the tower at all times, not just the top element. I had to display all the contents of the stack to the user. So this would not be a stack. I suppose the way in which I’m using the ArrayList for the pole is very similar to a stack, but all elements are shown so this isn’t a stack. Stacks can only “peek” at the top element.