In this lab you will practice using stacks as a substitute for recursion.

1. Implement a non-recursive stack-based version of the Towers of Hanoi algorithm. You must use a single stack. Since recursive calls are replaced by pushing and popping from the stack, each object in the stack must contain exactly the same parameters as a recursive call in the original version of the algorithm.

2. Using the non-recursive Mergesort code provided as guide, write a stack-based version of Quicksort.

As usual, write a report describing your results.