1. Consider the following insertion-sort-like algorithm: Sort the odd-indexed elements using insertion sort (leaving them in the odd-indexed locations). Sort the even-indexed elements using insertion sort (leaving them in the even-indexed locations). Sort all of the elements using (standard) insertion sort.
   (a) Write the pseudo code for this algorithm, *without* a sentinel.
   (b) Assume $n = 8$. What is the best-case number of comparisons? Just state the number and show your input. Otherwise, no justification needed.
   (c) Assume $n = 8$. What is the worst-case number of comparisons? Just state the number and show your input. Otherwise, no justification needed.
   (d) Calculate the number of comparisons the algorithm uses in the worst case for n even. Show your work.