

2.2

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1. Doing that (putting L into new list) won't work in-place because you will still need to reference L again in order to find the order that L was previously in. If you tried it in-place it would give bad results.

2. The worse case is that it must check through all possible permutations, and then by default it would loop through the array each of those times.

This would be $n!$ permutations for an n length array. $O(n! \cdot n)$

3. Permutation sort is worse than bubble sort. Bubble sort does $\frac{n(n-1)}{2}$ comparisons for $O(n^2)$. That's faster than permutation sort.