

1. $O(n)$
2. $O(1)$
3. Amount of time not change still $O(n)$, amount of memory changed become $O(n)$

The time has not changed because the algorithms in this problem perform constant work of per elements, processing all elements one time. Memory increase because new version of code create a new list of size n to store the result, while the original one changed in-place with constant extra memory.