

Problem 3: RearrangeDigits
Time efficiency: $O(n \cdot \log(n))$
Space efficiency: $O(n)$

Explanation: This problem I used mergeSort algorithm instead of quickSort or HeapSort. I used mergeSort, because a quickSort solution would have a time complexity of $O(n^2)$.

This made mergeSort an easy option for me. I'm using an array to store rearrange with an understanding my space complexity will grow linearly.