

Problem 3:

For this problem given an array merge sort is used to sort the array and then `rearrange_elements()` function rearranges the digit to get the max sum.

Time Complexity:

Mergesort() $\rightarrow O(n \log n)$

`rearrange()` $\rightarrow O(n) + O(\log n)$

Space Complexity:

$O(n)$