

5. You are given a string s consisting of digits and an integer k . A round can be completed if the length of s is greater than k . In one round, do the following:

Divide s into consecutive groups of size k such that the first k characters are in the first group, the next k characters are in the second group, and so on. Note that the size of the last group can be smaller than k . Replace each group of s with a string representing the sum of all its digits. For example, "346" is replaced with "13" because $3 + 4 + 6 = 13$. Merge consecutive groups together to form a new string. If the length of the string is greater than k , repeat from step 1. Return s after all rounds have been completed.

Example 1: Input: $s = "11111222223"$, $k = 3$ Output: "135" Explanation: • For the first round, we divide s into groups of size 3: "111", "112", "222", and "23". Then we calculate the digit sum of each group: $1 + 1 + 1 = 3$, $1 + 1 + 2 = 4$, $2 + 2 + 2 = 6$, and $2 + 3 = 5$. So, s becomes "3" + "4" + "6" + "5" = "3465" after the first round. • For the second round, we divide s into "346" and "5". Then we calculate the digit sum of each group: $3 + 4 + 6 = 13$, $5 = 5$. So, s becomes "13" + "5" = "135" after second round. Now, $s.length \leq k$, so we return "135" as the answer.

Example 2: Input: $s = "00000000"$, $k = 3$ Output: "000" Explanation: We divide s into "000", "000", and "00". Then we calculate the digit sum of each group: $0 + 0 + 0 = 0$, $0 + 0 + 0 = 0$, and $0 + 0 = 0$. s becomes "0" + "0" + "0" = "000", whose length is equal to k , so we return "000".