

Problem L. 5

Input file: *standard input*
 Output file: *standard output*
 Time limit: 5 seconds
 Memory limit: 555 mebibytes

You are given an array a of length n consisting of non-negative integers. Calculate the number of pairs (k, T) such that there exists a subsequence of a of length k whose sum is equal to T .

Just kidding, this is too general. Suppose the sum of elements of a is equal to S , then it is guaranteed that a has at least $S/5$ elements equal to 1.

Input

The first line contains two positive integers n and S ($1 \leq n, S \leq 2 \cdot 10^5$) — the number of elements in a and their sum.

The second line contains the array a_1, a_2, \dots, a_n ($0 \leq a_i \leq S$). It is guaranteed that $\sum_{i=1}^n a_i = S$ and at least $S/5$ elements of a are equal to 1.

Output

Print the number of pairs (k, T) such that there exists a subsequence of a of length k whose sum is equal to T .

Examples

<i>standard input</i>	<i>standard output</i>
7 9 0 0 0 1 1 2 5	42
10 33 9 9 8 1 1 1 1 1 1 1	48
10 14 2 4 4 1 0 1 0 1 0 1	81
10 14 3 5 3 0 1 0 1 0 1 0	87