3 Sum

Input file:	`standard input`
Output file:	`standard output`
Time limit:	0.5 seconds
Memory limit:	512 megabytes

Given n integers $a_1, \ldots, a_n$ and a modulus $M = 10^K - 1$. Find all tuples (i, j, k) $(1 \le i \le j \le k \le N)$, such that $a_i + a_j + a_k \equiv 0 \mod M$.

Input

The first line of the input contains two integers n and K $(1 \le n \le 500,\ 1 \le K \le 2 \times 10^4)$.

The i-th line of the next n lines contains a single integer a_i. It is guaranteed that $0 \le a_i < 10^{20\,000}$.

Output

Output a single line contains single integer, indicating the number of the tuples.

Example

standard input	standard output
4 1 0 1 10 17	3