

3 Sum

Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 512 megabytes

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

Input

The first line of the input contains two integers n and K ($1 \leq n \leq 100, 1 \leq K \leq 10^5$).
The i -th line of the next n lines contains a single integer a_i . It is guaranteed that $0 \leq a_i < 10^{10^5}$.

Output

The first line of the input contains a single integer r , indicating the number of the tuples.
Each line of the next r lines contains three integers (i, j, k) , listing the (i, j, k) that satisfy the requirement in lexicographical order of (i, j, k) .

Example

standard input	standard output
4 1 0 1 10 17	3