Special Subsequence

Time Limit: 1s

Shiina was walking in a park near her house and found an old book. She took and open the old book. Inside the book, there is an explanation about Special Subsequence. It was explained that given a sequence of numbers that consists of N integer and an integer M, then a special subsequence will be a subsequence from the sequence which the sum of all the numbers in the subsequence is M.

Being curious by the Special Subsequence described in the book, Shiina wrote N integer number and an integer M, then she started to count how many special subsequence in that sequence of numbers. It was getting dark and Shiina had to go home, but she was very curious about the Special Subsequence. Can you help Shiina calculate how many Special Subsequence in that sequence of numbers?

Input

The first line contains two integers N and M ($1 \le N \le 10^5$, $1 \le M \le 10^9$) indicated the value of integer N and M on the above explanation. The following N lines, each line contains an integer P_i ($1 \le P_i \le 10^5$) that represents integer i-th on the sequence of numbers.

Output

Print the number of Special Subsequence in the sequence.

Sample Input

10 6	
5	
1	
2	
3	
2	
1	
3	
4	
6	
8	

Sample Output