

1. Sum (summa)

1 second

20 points

Consider an N -element strictly increasing integer sequence A and an integer S .

Write a program to count the number of pairs of elements of A whose sum is S .

Input. The first line of the text file `summasis.txt` contains N and S , the length of the sequence and the required sum ($1 \leq N \leq 100\,000$, $0 \leq S \leq 2\,000\,000$). The following N lines contain elements of the sequence, one element A_i ($0 \leq A_i \leq 1\,000\,000$) on each line. The elements are distinct and ordered increasingly.

Output. The only line of the text file `summaeval.txt` should contain the number of pairs that consist of two distinct elements of the sequence and sum to S .

Example.

	<code>summasis.txt</code>	<code>summaeval.txt</code>
	5 10	2
	1	
	3	
	5	
	7	
	9	

The elements of the sequence are $A_1 = 1$, $A_2 = 3$, $A_3 = 5$, $A_4 = 7$, and $A_5 = 9$. There are two pairs that sum to 10: $A_1 + A_5 = 1 + 9 = 10$ and $A_2 + A_4 = 3 + 7 = 10$. Note that $A_3 + A_3 = 5 + 5 = 10$ is not counted, as it is not a sum of two distinct elements. $A_4 + A_2 = 7 + 3 = 10$ and $A_5 + A_1 = 9 + 1 = 10$ are also excluded, as they have already been counted.

Grading. In test cases worth 10 points in total, additionally $N \leq 100$.