



Problem L. Lower Algorithmics

Input file:	standard input
Output file:	standard output
Time limit:	4 seconds
Memory limit:	512 mebibytes

You are given a set A of integers from 1 to 1000 inclusive. Your task is to find the number of positive integers that can be represented as a sum of several elements of A, with number of summands being from ℓ to r inclusive. Equal summands are allowed. Note that each number is counted only once, even if it has several such representations.

Input

The first line of the input contains three space-separated integers: n, the number of elements in A $(1 \le n \le 1000)$, followed by ℓ and r, the bounds on number of summands $(1 \le \ell \le r \le 2000)$. The second line contains n space-separated integers a_1, a_2, \ldots, a_n $(1 \le a_1 < a_2 < \ldots < a_n \le 1000)$: the elements of the set A in increasing order.

Output

Output the number of integers that are representable as a sum of elements of A, with number of summands being between ℓ and r.

Examples

standard input	standard output
2 1 2	4
1 2	
3 1 3	18
1 3 10	
635	28
1 2 3 4 5 6	