## 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 $\ell$ 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 $A(1 \leq n \leq 1000)$, followed by $\ell$ and $r$, the bounds on number of summands ( $1 \leq \ell \leq r \leq 2000$ ). The second line contains $n$ space-separated integers $a_{1}, a_{2}, \ldots, a_{n}\left(1 \leq a_{1}<a_{2}<\ldots<a_{n} \leq 1000\right)$ : 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 $\ell$ and $r$.

## Examples

|  | standard input |  | standard output |  |
| :--- | :--- | :--- | :--- | :--- |
| 2 | 1 | 2 | 4 |  |
| 1 | 2 |  | 18 |  |
| 3 | 1 | 3 |  |  |
| 1 | 3 | 10 | 28 |  |
| 6 | 3 | 5 |  |  |
| 1 | 2 | 3 | 4 | 5 |

