

A. Army

time limit per test: 2 seconds
 memory limit per test: 256 megabytes
 input: standard input
 output: standard output

The Berland Armed Forces System consists of n ranks that are numbered using natural numbers from 1 to n , where 1 is the lowest rank and n is the highest rank.

One needs exactly d_i years to rise from rank i to rank $i + 1$. Reaching a certain rank i having not reached all the previous $i - 1$ ranks is impossible.

Vasya has just reached a new rank of a , but he dreams of holding the rank of b . Find for how many more years Vasya should serve in the army until he can finally realize his dream.

Input

The first input line contains an integer n ($2 \leq n \leq 100$). The second line contains $n - 1$ integers d_i ($1 \leq d_i \leq 100$). The third input line contains two integers a and b ($1 \leq a < b \leq n$). The numbers on the lines are space-separated.

Output

Print the single number which is the number of years that Vasya needs to rise from rank a to rank b .

Examples

input
3 5 6 1 2
output
5

input
3 5 6 1 3
output
11

→ Attention

Package for this problem was not updated by the problem writer or Codeforces administration after we've upgraded the judging servers. To adjust the time limit constraint, solution execution time will be multiplied by 2. For example, if your solution works for 400 ms on judging servers, then value 800 ms will be displayed and used to determine the verdict.

School Personal Contest #1 (Winter Computer School 2010/11)

Codeforces Beta Round #38 (ACM-ICPC Rules)

Finished

→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ACM-ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ Problem tags

implementation

No tag edit access

→ Contest materials

- Announcement