# 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 $n$ ($2 \le n \le 100$). The second line contains $n - 1$integers $d_i$ ($1 \le d_i \le 100$). The third input line contains two integers $a$ and $b$ ($1 \le a < b \le n$). 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**

Copy

```
3
5 6
1 2
```

**output**

Copy

```
5
```

**input**

Copy

```
3
5 6
1 3
```

**output**

Copy

```
11
```