

C - Modulo Summation

Time Limit: 2 sec / Memory Limit: 1024 MB

Score : 300 points

Problem Statement

You are given N positive integers a_1, a_2, \dots, a_N .

For a non-negative integer m , let $f(m) = (m \bmod a_1) + (m \bmod a_2) + \dots + (m \bmod a_N)$.

Here, $X \bmod Y$ denotes the remainder of the division of X by Y .

Find the maximum value of f .

Constraints

- All values in input are integers.
- $2 \leq N \leq 3000$
- $2 \leq a_i \leq 10^5$

Input

Input is given from Standard Input in the following format:

```
 $N$   
 $a_1 a_2 \dots a_N$ 
```

Output

Print the maximum value of f .

Sample Input 1 Copy

```
3  
3 4 6
```

Copy

Sample Output 1 Copy

```
10
```

Copy

$f(11) = (11 \bmod 3) + (11 \bmod 4) + (11 \bmod 6) = 10$ is the maximum value of f .

Sample Input 2

[Copy](#)

```
5
7 46 11 20 11
```

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Sample Output 2

[Copy](#)

```
90
```

[Copy](#)

Sample Input 3

[Copy](#)

```
7
994 518 941 851 647 2 581
```

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Sample Output 3

[Copy](#)

```
4527
```

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