



# Buying Hearthstone Decks

Problem

Submissions

Discussions

Mr. Manchester Sy wants to buy some cards in Hearthstone, but you know, Xavier's salary isn't so high, so he only has  $N$  pesos.

Unfortunately, in Hearthstone, cards can only be bought in sets, each set costs the number of cards it has. So, there are  $K$  sets, with  $A_1, A_2, A_3, \dots, A_K$  cards in each set.

Of course, sets can be bought multiple times.

Find out the maximum amount of cards that Mr. Sy can get, if he doesn't go beyond  $N$  pesos.

## Input Format

The first line contains two integers,  $N$  and  $K$ , ( $1 \leq N, K \leq 10^4$ ), the amount of pesos that Mr. Sy has, and the number of sets he can buy from.

Then, follows  $K$  integers,  $A_1, A_2, A_3, \dots, A_K$  ( $1 \leq A_i \leq 10^4$ ), the number of cards in each set.

## Output Format

Output a single integer, the maximum number of cards that Mr. Sy can buy, that he can still afford.

**Note:** There are no partial points for this challenge.

## Sample Input

```
20 3
7 8 9
```

## Sample Output

```
18
```

## Explanation

For the example, Mr. Manchester Sy has exactly 20 pesos, and there are 3 card packs to choose from, with costs {7, 8, 9}.

There are some ways we can choose them, particularly:

- Buy just the set {7}. The total is 7.
- Buy just the set {8}. The total is 8.
- Buy just the set {9}. The total is 9.
- Buy the sets {7, 7}. The total is 14.
- Buy the sets {7, 8}. The total is 15.
- Buy the sets {7, 9}. The total is 16.
- Buy the sets {8, 8}. The total is 16.
- Buy the sets {8, 9}. The total is 17.

- Buy the sets **{9, 9}**. The total is **18**.

It's easy to see that the maximum cost that doesn't go over his money is **18**.

We can't choose, for example, **{7, 7, 7}**, since he can't afford cost of **21** pesos.

[f](#) [t](#) [in](#)Submissions: [57](#)

Max Score: 1

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Current Buffer (saved locally, editable)

Java 8

```
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should
8            be named Solution. */
9     }
10 }
```

Line: 1 Col: 1

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