

Problem Statement

You and your $K - 1$ friends want to buy N flowers. Flower number i has cost c_i . Unfortunately the seller does not want just one customer to buy a lot of flowers, so he tries to change the price of flowers for customers who have already bought some flowers. More precisely, if a customer has already bought x flowers, he should pay $\frac{(x+1)}{c_i}$ dollars to buy flower number i .

You and your $K - 1$ friends want to buy all N flowers in such a way that you spend the least amount of money. You can buy the flowers in any order.

Input:

The first line of input contains two integers N and K ($K \leq N$). The next line contains N space separated positive integers c_1, c_2, \dots, c_N .

Output:

Print the minimum amount of money you (and your friends) have to pay in order to buy all N flowers.

Constraints

$1 \leq N, K \leq 100$

Any c_i is not more than 10^6

Result is guaranteed to be less than 2^{31}

Sample input #00

```
3 3
2 5 6
```

Sample output #00

```
13
```

Sample input #01

```
3 2
2 5 6
```

Sample output #01

```
15
```

Explanation :

Sample Case #00: In this example, all of you should buy one flower each. Hence, you'll have to pay 13 dollars.

Sample Case #01: Here one of the friend buys first two flowers in decreasing order of their price. So he will pay $(0+1)*5 + (1+1)*2 = 9$. And other friend will buy the costliest flower of cost 6. So total money need is $9+6=15$.