Greedy Florist

You and $K - 1$ friends want to buy N flowers. Each flower f_i has some cost c_i. The florist is greedy and wants to maximize his number of new customers, so he increases the sale price of flowers for repeat customers; more precisely, if a customer has already purchased x flowers, price P for f_i is $P_{f_i} = (x + 1) \times c_i$.

Find and print the minimum cost for your group to purchase N flowers.

Note: You can purchase the flowers in any order.

Input Format

The first line contains two integers, N (number of flowers to purchase) and K (the size of your group of friends, including you).
The second line contains N space-separated positive integers describing the cost $(c_0, c_1, \ldots, c_{N-2}, c_{N-1})$ for each flower f_i .

Constraints

- $1 \leq N, K \leq 100$

- $1 \leq c_i \leq 10^6$

- $answer < 2^{31}$.

- $0 \leq i \leq N - 1$

Output Format

Print the minimum cost for buying N flowers.

Sample Input 0

```
3 3
2 5 6
```

Sample Output 0

```
13
```

Sample Input 1

```
3 2
2 5 6
```

Sample Output 1

```
15
```

Explanation

Sample Case 0:
There are **3** flowers and **3** people in your group. Each person buys one flower and the sum of prices paid is

13 dollars, so we print 13.

There are 3 flowers and 2 people in your group. The first person purchases 2 flowers, f_0 and f_1, in order of decreasing price; this means they buy the more expensive flower first at price $P_{f_1} = (0+1) \times 5 = 5 \: dollars$ and the less expensive flower second at price $P_{f_0} = (1+1) \times 2 = 4 \: dollars$. The second person buys the most expensive flower at price $P_{f_2} = (0+1) \times 6 = 6 \: dollars$. We print the sum of these purchases $(5+4+6)$, which is 15.