

## Journey Discounts

You are planning to spend your holidays touring Europe, staying each night in a different city for  $N$  consecutive nights. Luckily for you, your favourite website for booking accommodations offers special discounts for such journeys.

You have already chosen the hotel you want to stay in for each city, so you know the price  $P_i$  of the room you'll be staying at during the  $i$ -th night of your holidays ( $1 \leq i \leq N$ ). After staying for a night in a hotel you booked through the website, you are awarded one bonus point, and you can exchange  $K$  of these points in your account at any time for a free night in any hotel. The night you spend for free using bonus points won't give you another bonus point. There is no limit on the number of bonus points you can collect in your account.

For example, consider the case with  $N = 6$  and  $K = 2$  where the prices for the rooms are  $P_1 = 10, P_2 = 3, P_3 = 12, P_4 = 15, P_5 = 12$  and  $P_6 = 18$ . After paying for the first four nights you would have four points in your account, which you could exchange to stay for free the remaining two nights, paying a total of  $P_1 + P_2 + P_3 + P_4 = 40$  for your accommodation. However, if after the first three nights you use two of the three points you earned to stay the fourth night for free, then you can pay for the fifth night and use the final two points to get the sixth one for free. In this case, the total cost of your accommodation is  $P_1 + P_2 + P_3 + P_5 = 37$ , so this option is actually more convenient.

You want to make a program to find out what the minimum possible cost for your holidays' accommodation is.

### Input

The first line of the input contains two integers  $N$  and  $K$  ( $1 \leq N, K \leq 100\,000$ ), representing the number of nights and the number of points you need in order to get a free night.

The second line contains  $N$  integers  $P_1, P_2, \dots, P_N$  ( $1 \leq P_i \leq 10^4$ ), representing the prices of the rooms you will be staying at during your holidays.

### Output

Print a line with one integer, the minimum cost of your accommodation for all nights.

### Examples

input	output
6 2 10 3 12 15 12 18	37
6 1 10 3 12 15 12 18	25
5 5 1 2 3 4 5	15