Abrar and his friends are planning to start a garden. So they went to the local nursery to buy some plants. They are thinking about collecting *all the available types of plants of the nursery*. But the owner of the nursery, Mr. X, wants to maximize his number of new customers and the money he makes. To do this, he decides to multiply the price of each plant by the number of a customer's previously purchased plants plus **1**. For example, the price of the first plant bought by a customer will be *(0 + 1) * original price of that plant*, the price of the second plant bought by any customer will be *(1 + 1) * original price of that plant* and so on.

Given the number of plants of the nursery, the size of the group of friends and the original prices of the plants, determine the minimum cost to purchase **all** of the plants.

10^6 + 2*10^6 + … + 51 * 10^6 = 10^6 (1+2+...+51) = 51*26*10^6 = 1326*10^6

10^6 + 2*10^6 + … + 49 * 10^6 = 25*51*10^6 = 1275*10^6

2601*10^6 = 2601000000 (2147483647) (4294967295)

Long long =>

1-50 50

2-49 48 + 1

Input/Output:

You will take input and give output to a console.

Input Format:

The first line contains two space-separated integers *N* and *K*, the number of plants and the number of friends, respectively.

The second line contains *N* space-separated positive integers, the original price of each plant.

Output Format:

The minimum cost to buy all the plants.

Constraints:

$1 < N, K \leq 100$

$1 < price\ of\ each\ plant \leq 1000000$

$0 \leq i < N$

The sample I/O:

Input	Output
3 3 2 5 6	13
3 2 2 5 6	15

Explanation for the second sample:

There are two friends and they have to buy three plants. So, one plant's price will be doubled. Each of them will buy the 2nd and 3rd plant with the original price and any one of them will buy the 1st plant with double the price.

So, minimum total cost = 6 + 5 + 2 (1 + 1) = 15

Special Instructions:

Write ***readable, re-usable, well-structured, quality*** code. This includes but is not limited to writing appropriate functions for implementation of the required algorithms, meaningful naming of the variables, suitable comments where required, proper indentation etc.

Please **DO NOT COPY** solutions from anywhere (your friends, seniors, internet etc.). Implement the algorithms with your style of coding. Any form of plagiarism (irrespective of source or destination), will result in getting -100% marks. You have to protect your code.

Also, be informed that for the repeated offence of plagiarism, the departmental policies suggest stricter measures.

Submission Guideline:

1. Create a directory with your 7 digit student id as its name
2. Put the source files only into the directory created in 1
3. Zip the directory
4. Upload the zip into moodle

For example, if your student id is 1905123, create a directory named 1905123. Put your source files(.c, .cpp, .java, .py, .h, .hpp etc) only into 1905123. Zip 1905123 into 1905123.zip and upload the 1905123.zip into moodle.

Failure to follow the above-mentioned submission guideline will result in up to 10% penalty.

Submission Deadline:

Feb 5, 2021 10:50 AM

This is a hard deadline and there shall be no extensions for any reason whatsoever**.**

Unsigned int
Long long

71, 72, 73, 75