

B. Rocks

Time Limit: 1 second

Points: 100

Terry is a rock collector. He starts at position 0 on a number line (i.e. x -coordinate zero), and is trying to get to position m . Along the way are n rocks, the i th of which is at position x_i , where $0 < x_i < m$. Each time he come across a rock, he must pick it up. Furthermore, each unit of distance he travels costs k energy, where k is equal to the number of rocks that he is holding at the time. How much energy in total does Terry need to collect all n rocks and reach position m ?

Input

The first line of input consists of two integers, n and m , representing the total number of rocks and Terry's final position, respectively. The second line of input consists of n space-separated integers, x_1, x_2, \dots, x_n , the positions of the rocks.

Constraints

All input will satisfy the following constraints:

- $1 \leq n \leq 1,000,000$.
- $1 \leq m \leq 1,000,000,000$.
- For all $1 \leq i \leq n$, $0 < x_i \leq m$.

Output

Output one integer, total amount of energy required to collect all n rocks and reach position m .

Sample Input 1

```
4 10
5 4 7 4
```

Sample Output 1

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20
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Sample Input 2

```
9 1000000000
100000000 200000000 300000000 400000000 500000000 600000000 700000000 800000000 900000000
```

Sample Output 2

4500000000

Explanation

In sample case 1, to collect the rocks, Terry should perform the following actions in order:

- Walk from position 0 to position 4. Since he is carrying 0 rocks, this requires 0 energy.
- Collect the two rocks at position 4.
- Walk from position 4 to position 5. Since he is carrying 2 rocks, and he travels 1 unit, this requires $2 \times 1 = 2$ energy.
- Collect the rock at position 5.
- Walk from position 5 to position 7. Since he is carrying 3 rocks, and he travels 2 units, this requires $3 \times 2 = 6$ energy.
- Collect the rock at position 7.
- Walk from position 7 to position 10. Since he is carrying 4 rocks, and he travels 3 units, this requires $4 \times 3 = 12$ energy.

In total, he must use $0 + 2 + 6 + 12 = 20$ units of energy.

In sample case 2, each pair of consecutive rocks is 10^8 units apart. Starting from position 0, Terry should collect his first rock at position 100,000,000, his second rock at position 200,000,000, and so on.