childsetter2

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

Brian Xiao the literal child has set another contest for you!

The contest is M minutes long, with N problems. The i-th problem has a positive integer difficulty value, d_i. A problem with difficulty d takes d minutes to do, and is worth $d+1$ points. There is no partial credit for completing part of a problem.

If you leave the contest hall X minutes before time is up, you will also receive X bonus points added to your score. (After leaving the contest hall you will not be able to continue doing problems)

What is the maximum possible score you can get?

Input

The first line of input contains two itnegers, N and M.

The second line of input contains N space-seperated integers, $d_1, d_2, ..., d_N$.

Output

Output the maximum possible score

Scoring

For all test cases, it is guaranteed that:

- $1 \leq N \leq 10^5$
- $1 \leq M \leq 10^{18}$
- $1 \leq d_i \leq 10^9$

Subtask	Score	Additional constraints
1	15	$M = 10^{18}$
2	15	$d_1 = d_2 = ... = d_N$.
3	70	—
4	0	Sample test cases

Examples

standard input	standard output
4 7 1 2 3 4	10
4 45 15 10 5 10	49
5 10 20 30 40 50 60	10
5 10 8 4 13 5 7	12

Note

n the first test case, you can do the problems with difficulties $1, 2$, and 4, in 7 minutes. You will get $2 + 3 + 5 = 10$ points this way (no bonus points, because there is no extra time remaining).

In the second test case, you can do all four problems with 5 minutes to spare, and get a total of 49 points: $16 + 11 + 6 + 11 = 44$ points from the problems, plus 5 bonus points.

In the third test case, you cannot do any one of the problems within the given time! So the best thing to do is to leave right after the timer starts, which gives 10 bonus points.