Back To School '18: Making Friends

The school year is starting soon, so Yunji wants to make some friends through his school's Discord server. In the server, there are N calls simultaneously going on, each with M_i participants.

Unfortunately, ~~everyone from Yunji's school dislikes him~~ everyone has important things to do other than Discord, so for every minute he is in the ith call, 1 person will leave that call forever. However, if he is not in that call, no one will leave the call.

Yunji has X minutes before school starts. At the beginning of each minute, he can either leave the current call and join a different call, or stay in the current call. The *quality* of each call is defined as the sum of the number of participants (excluding Yunji) for every minute he stays in that call. Note that there can't be negative participants in the call, so the sum is capped at 0.

The *total quality* is the sum of the *qualities* of every call i $(1 \le i \le N)$. If he does not ever join a call i, the *quality* of call i is 0.

Help Yunji maximize the *total quality*.

Input Specification

The first line will contain 2 integers, N, X $(1 \le N \le 10^5, 1 \le X \le 10^4)$.

The second line will contain N integers, $M_1, M_2, M_3, ..., M_N (1 \le M_i \le 10^9)$.

Output Specification

Output the maximum *total quality* that Yunji can achieve through strategically hopping between calls.

Subtasks

Subtask 1 [5%]

$M_i = M_{i+1}$ for all $1 \le i \le N$.

Subtask 2 [15%]

$N \le 100$

Subtask 3 [80%]

No further constraints.

Sample Input 1

```
2 2
9 3
```

Sample Output 1

```
17
```

Explanation for Sample 1

Yunji can spend all his time in the first call: if he does there will be 9 participants in the call in the first minute, and 8 participants in the second minute. The *quality* of this call would be $9 + 8 = 17$. The *total quality* would be $17 + 0 = 17$.

Sample Input 2

```
2 3
5 6
```

Sample Output 2

```
16
```

Explanation for Sample 2

Yunji can spend the first minute in call 1, for a *quality* of 5. He can then spend two minutes in call 2, for a *quality* of $6 + 5 = 11$. The *total quality* is therefore $5 + 11 = 16$.