India Vs Pak



IND vs PAK cricket match this is. India is batting and on the pitch we have Virat. He is in his form today and wants to score as much as possible. However, there is a twist.

Every number of runs has a different number of scores associated with it. If Virat runs i number of times on a ball, then he will get A[i] score.

He can run as many runs as possible on a ball. But Virat is getting old so he cannot run more than X runs in total.

Help him find the maximum score they can achieve.

Input Format

First line contains one number X, where X is the maximum number of runs Virat can run. Next line contains X numbers denoting score for every run. (from 1 to X runs)

Constraints

0<= X <= 10000 1<=Ai<=10000

Output Format

One number denoting the maximum score Virat can achieve.

Sample Input 0

5 2 3 6 9 10

Sample Output 0

11

Explanation 0

If Virat runs 5 runs at once,

$$A[5] = 10$$

If Virat runs 4 runs and 1 run separately.

$$A[4]+A[1] = 9 + 2 = 11$$

Similarly, other combinations are,

$$A[1]+A[1]+A[1]+A[1]+A[1] = 2 + 2 + 2 + 2 + 2 = 10$$

$$A[3]+A[1]+A[1] = 6 + 2 + 2 = 10$$

$$A[2]+A[2] + A[1] = 3 + 3 + 2 = 8$$

Maximum Score can be availed if he runs 4 runs and 1 run separately, ie 11. Hence answer is 11