Today, the bookstore owner has a store open for customers.length minutes.  Every minute, some number of customers (customers[i]) enter the store, and all those customers leave after the end of that minute.

On some minutes, the bookstore owner is grumpy.  If the bookstore owner is grumpy on the i-th minute, grumpy[i] = 1, otherwise grumpy[i] = 0.  When the bookstore owner is grumpy, the customers of that minute are not satisfied, otherwise they are satisfied.

The bookstore owner knows a secret technique to keep themselves not grumpy for X minutes straight, but can only use it once.

Return the maximum number of customers that can be satisfied throughout the day.

**Example 1:**

**Input:** customers = [1,0,1,2,1,1,7,5], grumpy = [0,1,0,1,0,1,0,1], X = 3

**Output:** 16

**Explanation:** The bookstore owner keeps themselves not grumpy for the last 3 minutes.

The maximum number of customers that can be satisfied = 1 + 1 + 1 + 1 + 7 + 5 = 16.

**Note:**

* 1 <= X <= customers.length == grumpy.length <= 20000
* 0 <= customers[i] <= 1000
* 0 <= grumpy[i] <= 1