Dominating set in a path

Given an array of n positive integers A[0]~A[n-1], please find the minimum total sum of a subset such that each non-chosen element A[i] has at least one neighbor in the set, i.e., A[i-1] or A[i+1] must be chosen.

Input: The input consists of several test cases, each in one line. Each case starts from an integer *n* indicating the number of elements in the array *A*. Followed this integer there are *n* positive integers which are *A*[0],*A*[1],... ,*A*[*n*-1]. We suppose that *n* <= 500 and 0 < *A*[*i*] < 1000. The case with *n* = 0 is the end of the input.

Output: For each case, output the minimum total sum in one line.

Sample Input:

3 1 2 3

4 10 9 1 7

5 5 9 7 2 1

0

Output of the sample input:

2

10

7