Dynamic Adventure

You are on the adventure, with lots of gems but also lots of traps. Since you have telescope, you know how many gems or traps are there in every block. For ex: [0 4 -3 -6 10 -7 5 0] indicate there are 8 blocks, and 1st, 2nd, 5th , 7th, and 8th block as 0, 4, 10, 5 and 0 gems respectively. 3rd, 4th, and 6th, block has traps where you lose 3, 6 and 7 gems respectively. In this adventure you are also provided with a special jumping shoe that can jump maximum of x blocks at once. Which means you can jump 1~x block in one move. Also, you must reach the exact escaping point to be rescued and end the adventure. During this process you must maximize the total gems you have collected. Good luck and have a fun adventure!

You will get two kinds of input. First number is x. The rest of the numbers are the information of blocks. The gem blocks are non-negative, and trap blocks are negative numbers. You should print only one number, which is maximum number of gems you can collect. If you can't get to the escape block, print the string "impossible".

Since you have enough gems, losing as little can also be the best way to finish this adventure.

For number of blocks n, 2 <= n <= 10000

For option x, 1 <= x <= 100

For each block status b, -10000 <= b <= 10000.

Input 1

2 2 4 -3 -6 10 -7 5 0

Output 1

18

Input 2

3 0 4 -3 10 5 0 0 4 -3 10 5 0 0 4 -3 10 5 0 3

Output 2

60