

Bob the Builder Loves Construction!

Bob the Builder is choosing concrete pillars to use in building a client's house, and he needs to choose 3 of them to begin to lay the foundation.

The client wants to maximize the height of their house, and as Bob wants the client to be happy, he decides to use the longest possible rods available to him. Can you help him find the total height of the pillars he should choose?

Instructions

Problem

Given an array of n numbers ($1 \leq n \leq 50$), determine the maximum sum of any 3 numbers taken from that array.

Input Specification

The first line will contain the integer n . The following n lines will contain an integer on each line. Note that the element on the i th line is at the $(i-1)$ th index in the array.

Output Specification

Print out the sum of the three largest numbers in the array.

Sample

5
2
3
4
5
1

ans = 12