Greedy or not

Aryan Katiyar

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1 Introduction

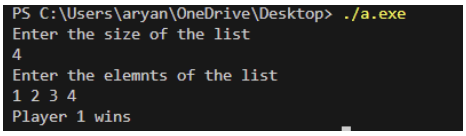
There is a list of n numbers and two players who move alternately. On each move, a player removes either the first or last number from the list, and their score increases by that number and that number gets deleted. Both players try to maximize their scores and play optimally. A certain player wins if their score is more than half of the total.

2 Task

You have to write a code which takes input a number 'n' which is the size of the list and then the element of the list. It then outputs which Player wins if both play optimally.You are provided with an executable which contains the correct code. You can use this to check whether your code gives the correct output.We are not concerned about the time complexity of you solution.

2.1 Using the executable

Open the terminal where the executable is located and run the executable using the command "./a.exe". Suppose the list is of size 4 and it contains the elements 1 2 3 4 then input this as shown below.



2.2 Additional Tasks(optional)

- (If you know Dynamic Programming) Optimize your code to solve it in quadratic time.
- Write you code in Python.