

# 1489. Pizza With 3n Slices

## Difficulty : Hard

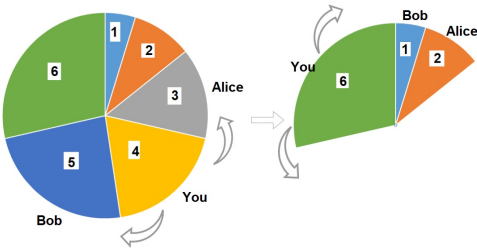
<https://leetcode.com/problems/pizza-with-3n-slices>

There is a pizza with  $3n$  slices of varying size, you and your friends will take slices of pizza as follows:

- You will pick **any** pizza slice.
- Your friend Alice will pick the next slice in the anti-clockwise direction of your pick.
- Your friend Bob will pick the next slice in the clockwise direction of your pick.
- Repeat until there are no more slices of pizzas.

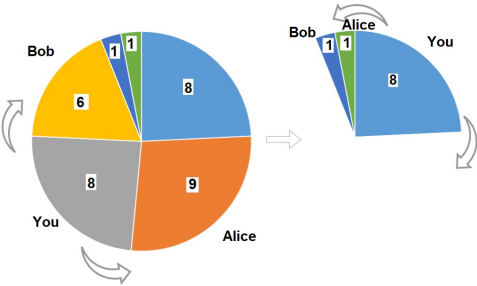
Given an integer array `slices` that represent the sizes of the pizza slices in a clockwise direction, return *the maximum possible sum of slice sizes that you can pick*.

### Example 1:



**Input:** `slices = [1,2,3,4,5,6]`  
**Output:** 10  
**Explanation:** Pick pizza slice of size 4, Alice and Bob will pick slices with size 3 and 5 respectively. Then Pick slices with size 6, finally Alice and Bob will pick slice of size 2 and 1 respectively. Total sum of sizes of picked slices is 10.

### Example 2:



**Input:** `slices = [8,9,8,6,1,1]`  
**Output:** 16  
**Explanation:** Pick pizza slice of size 8 in each turn. If you pick slice with size 9 your partners will pick slices of size 8.

### Constraints:

- $3 * n == \text{slices.length}$
- $1 \leq \text{slices.length} \leq 500$
- $1 \leq \text{slices}[i] \leq 1000$