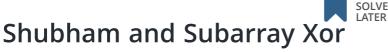
CHALLENGES

PRACTICE

COMPANIES

All Tracks > Data Structures > Advanced Data Structures > Trie (Keyword Tree) > Problem



Attempted by: 421 / Accuracy: 63% / Maximum Score: 30 /

O Votes

Tag(s):

Advanced Data Structures, Data Structures, Medium, Trie (Keyword Tree), medium

PROBLEM

EDITORIAL

MY SUBMISSIONS

ANALYTICS

You are given an array consisting of n integers $a_1,a_2,\ldots a_n.$ Find the maximum value of xor of sum of 2 disjoint subarrays i.e maximize ($\text{sum}(l_1,r_1)$ xor $\text{sum}(l_2,r_2)$)

where $1 \le l_1 \le r_1 < l_2 \le r_2 \le n$.

Note: sum(l,r) denotes sum of elements from indices l to r both inclusive.

Input Format

First line contains number n denoting the number of array elements.

Second line contains n integers denoting $a_1, a_2, \ldots a_n$

.

Output Format

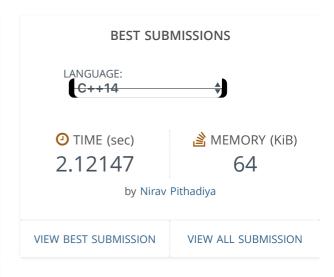
Output the required value.

Constraints

 $1 \le n \le 900$

 $1 \le a_i \le 100$

SAMPLE INPUT	SAMPLE OUTPUT
4 1 2 1 3	7



CONTRIBUTOR



AUTHOR shubham goyal



TESTER Mitesh Agrawal

THIS PROBLEM WAS ASKED IN



SOCIAL SHARE









Explanation

```
The optimal values of l1, r1, l2, r2 are 1,2,3,4. 
Sum(1,2) = 1 + 2 = 3 Sum(3,4) = 1 + 3 = 4 Sum(1,2) \text{ xor } Sum(3,4) = 7. Note that you cannot get a value greater than 7.
```

Time Limit:	1.0 sec(s) for each input file.
Memory Limit:	257 MB
Source Limit:	1024 KB
Marking Scheme:	Marks are awarded when all the
	testcases pass.
Allowed Languages:	C, C++, C++14, Clojure, C#, D, Erlang,
	F#, Go, Groovy, Haskell, Java, Java 8,
	JavaScript(Rhino), JavaScript(Node.js),
	Julia, Kotlin, Lisp, Lisp (SBCL), Lua,
	Objective-C, OCaml, Octave, Pascal,
	Perl, PHP, Python, Python 3, R(RScript),
	Racket, Ruby, Rust, Scala, Swift, Visual
	Basic

CODE EDITOR

```
Enter your code or Upload your code as file.
           C (gcc 5.4.0)
1
2
  // Sample code to perform I/O:
3
  scanf("%s", name);
4
                                  // Rea
  printf("Hi, %s.\n", name); // Wri
5
  // Warning: Printing unwanted or ill-f
7
8
9
  // Write your code here
```

