SOLVE LATER

Shubham and Subarray Xor

Attempted by: **421** / Accuracy: **63%** / Maximum Score: **30** /
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Tag(s):

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

You are given an array consisting of n integers $a_1, a_2, .. a_n$. Find the maximum value of xor of sum of 2 disjoint subarrays i.e maximize (sum(l_1, r_1) xor sum(l_2, r_2))
where $1 \leq l_1 \leq r_1 < l_2 \leq r_2 \leq n$.
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 $a_1, a_2, .. a_n$.

Output Format

Output the required value.

Constraints

$1 \leq n \leq 900$
$1 \leq a_i \leq 100$

SAMPLE INPUT	SAMPLE OUTPUT
4 1 2 1 3	7

BEST SUBMISSIONS

LANGUAGE: C++14

TIME (sec)	MEMORY (KiB)
2.12147	64

by Nirav Pithadiya

VIEW BEST SUBMISSION VIEW ALL SUBMISSION

CONTRIBUTOR

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TESTER
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THIS PROBLEM WAS ASKED IN

CHALLENGE NAME
January Easy '18

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) 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.

Save C (gcc 5.4.0)

```
1  /*
2  // Sample code to perform I/O:
3
4  scanf("%s", name);                  // Rea
5  printf("Hi, %s.\n", name);          // Wri
6
7  // Warning: Printing unwanted or ill-f
8  */
9
10 // Write your code here
```

11

1:1

Press Ctrl-space for autocomplete suggestions.

Provide custom input

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Carlos Joa 2 days ago

Can we choose an empty subarray? If not, what should be the correct output for N = 1?

2 votes ● Reply ● Message ● Permalink

shubham goyal Moderator 2 days ago

Since we cannot pick 2 disjoint subarrays when N=1 so the answer for this case is 0.

0 votes ● Reply ● Message ● Permalink

we7d Edited 2 days ago

test cases seem weak, i have a submitted a wrong solution (not talking about corner cases) and got