



Special Subarray

Max. score: 100

You are given an array A of length N . A subarray is called special if the **XOR** and Sum of the subarray are the same. Find the number of special subarrays of A .

Input Format

- The first line contains an integer T , which denotes the number of test cases.
- The first line of each test case contains an integer N , which denotes the length of array A .
- The second line of each test case contains N space-separated integers, denoting elements of array A .

Output Format

For each test case, print the number of special subarrays of A .

Constraints

$$1 \leq T \leq 10$$

$$1 \leq N \leq 10^5$$

$$1 \leq A_i \leq 10^9$$

SAMPLE INPUT	SAMPLE OUTPUT
2 3 2 1 6 2 4 5	5 2

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2 3 2 1 6 2 4 5	5 2

Explanation

For test case 1:

- Subarray [2], sum=2, XOR=2.
- Subarray [2, 1], sum=3, XOR=3.
- Subarray [2, 1, 6], sum=9, XOR=5.
- Subarray [1], sum=1, XOR=1.
- Subarray [1, 6], sum=7, XOR=7.
- Subarray [6], sum=6, XOR=6.

Hence, the answer is 5.

For test case 2:

- Subarray [4], sum=4, XOR=4.
- Subarray [4, 5], sum=9, XOR=1.
- Subarray [5], sum=5, XOR=5.

Hence, the answer is 2.

Time Limit:	1.0 sec(s) for each input file.
Memory Limit:	256 MB
Source Limit:	1024 KB
Marking Scheme:	Score is assigned if any testcase passes.
Allowed Languages:	Bash, C, C++, C++14, C++17, Clojure, C#, D, Erlang, F#, Go, Groovy, Haskell, Java, Java 8, Java 14, JavaScript(Rhino), JavaScript(Node.js), Julia, Kotlin, Lisp, Lisp (SBCL), Lua, Objective-C, OCaml, Octave, Pascal, Perl, PHP, Python, Python 3, Python 3.8, Racket, Ruby, Rust, Scala, Swift-4.1, Swift, TypeScript, Visual Basic