Mr Phoenix And OR Operation

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Mr Phoenix has a sequence of ‘n’ non negative integers: A1,A2,A3,...,An. Mr CSI-DTU has invented a function F(l,r) {l,r, are non negative integers such that 1<=l<=r<=n)} and F(l,r)=Al | A(l+1) | A(l+2) |...| Ar. ie bitwise OR of all the elements with indexes from l to r.(both inclusive)

Now, Mr Phoenix has decided to calculate the values of F(l,r) for all l, r such that 1<=l<=r<=n and he wants to know how many distinct values are there of F(l,r) . Help Mr Phoenix in finding out that count.

Input

First line of input consists of ‘T’-number of test cases. First line of each test case consists of ‘n’-number of elements of the array and the second line consists of ‘n’ numbers .

Output

Print the desired value corresponding to each test case on a single line.

Constraints

1<=T<=50
1<=n<=10^5
0<=Ai<=10^6

Sample Input

2
3
1 2 0
5
0 1 2 0 4

Sample Output

4
7