

# Problem A

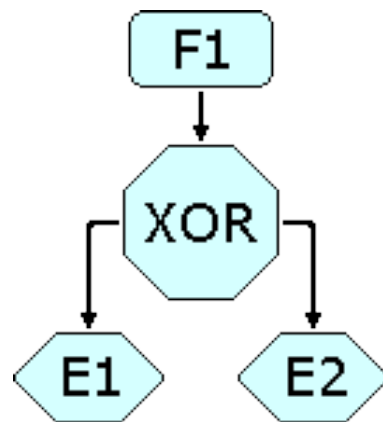
## Albert's Happy XOR

Albert just learned about the exclusive or (XOR) function today and is very excited to use it. He has a list of integers and would like to know how many ways there are to choose two numbers in the list that produce his favourite number when XORed together.

The XOR operator is  $\wedge$  in C/C++, Java, and Python.

### Input

The first line contains a single integer  $T \leq 10$  giving the number of test cases. Each test case begins with a line containing two integers  $N$  ( $1 \leq N \leq 1000$ ), the number of integers, and  $F$  ( $0 \leq F \leq 10^9$ ), Albert's favourite integer. The next line contains  $N$  space separated integers  $a_i$  ( $0 \leq a_i \leq 10^9$ ), where  $a_i$  is the  $i^{\text{th}}$  number in Albert's list.



### Output

For each test case, output a single line containing the answer.

### Explanation of sample input

In the first test case, every pair of 10s will XOR to 0, and there are 3 ways to choose such a pair.

Sample Input	Sample Output
2	3
5 0	2
1 10 10 2 10	
4 2	
4 5 6 7	