Assignment Case	
COMP6047 Algorithm and Programming	BINUS UNIVERSITY Software Laboratory Center
Computer Science	**<Case Code>**
Valid on *Compact Semester Year 2018/2019*	**Revision 00**

Soal
Case

Couple Matcher

Jojo had just been invited to a party, but the party itself needs the invited ones to come in couple. Knowing Jojo, who had been dedicating his life solely for research in order to furthermore increase the quality of Binus, this condition is deemed very difficult. But, he also can't afford to not participate in the event since this is a famous event after all.

Fortunately, for those who came to the party without a couple had a chance to be paired with random stranger by choosing a random number. Note that if there's 2 of same number, then a couple is indeed made.

You, as the programmer, are tasked to determine how many of those who came to the party and yet still single until the end of party. You are also need to determine the numbers that was help by those people who are still at the end of party.

Format Input

The first line consist of a single integer N. N indicates the number of test cases.

For each test case, there will be two integers K and A, where K indicates the number of people that came to the party and A indicates the random number number for each people

For the next K line, it consists of positive A_{th} number

Format Output

For each test case, output the answer with format "Case #T : B | C", where T is the number of test cases, B is total number of couple made and C are numbers that was held by people who are still single at the end of party. Note that the number must be ordered from small to big.

Constraints

$1 \leq N \leq 5$

$1 \leq K \leq 10000$

$1 \leq A \leq 100$

Sample Input	Sample Output
3	Case #1 : 1 | 1 3
4	Case #2 : 2 | 2 3 4
1 2 2 3	Case #3 : 3 | 0
7	
5 3 3 3 5 4 2	
6	
1 1 2 2 3 3	

Explanation

Test Case #2:

     5 3 3 3 5 4 2

     There's 2 number that can be made a couple : 3 and 5, so there will be 2 couples made

     After the couple is made, there still left number 3 4 and 2, so there will be 3 number

Test Case #3

     1 1 2 2 3 3

     Since all of the random number came in pair, therefore there will be nobody is going home alone. So the output is 3 for total pair and 0 since there's nobody is alone.