

Column

Lili is given N numbers and tasked to sort and print it. To save paper, she decides to make the data into several lines. Help her print the data.

Format Input

The first line will be an integer T denoting the number of test cases. The first line of each test cases will consist of two integers N and M , the number of data and the number of lines. The next line will consist of N integers, a_1, a_2, \dots, a_n , the data to be printed.

Format Output

For each test case, print "Case #X:" (X starts with 1), then on the next line print the data as the format. The smallest data will be printed on the first line, then the second line, and so on. The $(M+1)$ -th data will be printed on the first line. Please refer the sample output for clarify.

Constraints

$1 \leq T \leq 10$

$1 \leq M \leq N \leq 200$

$0 \leq a_1, a_2, \dots, a_n \leq 1\,000\,000\,000$

Sample Input (standard input)	Sample Output (standard output)
<pre> 5 18 4 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 10 3 6 5 1 4 2 10 3 8 9 7 10 4 9 0 1 23 2 1 8 5 42 15 12 3 1 2 3 4 5 6 7 8 1 2 3 4 12 2 45 13 781 82 293 51 18 33 51 76 68 242 </pre>	<pre> Case #1: 1 5 9 13 17 2 6 10 14 18 3 7 11 15 4 8 12 16 Case #2: 1 4 7 10 2 5 8 3 6 9 Case #3: 0 5 23 1 8 42 1 9 2 15 Case #4: 1 2 4 6 1 3 4 7 2 3 5 8 Case #5: 13 33 51 68 82 293 18 45 51 76 242 781 </pre>

Note

Please don't print any trailing spaces.