Koko

Sharaf is a very kind man. He teaches his little brother programing. when his brother get a problem Accepted after getting N times wrong answer, Sharaf asked his brother to write the word "koko" N times Where the first letter in the statement will be an upper case letter "K", every two words will be separated with comma "," and the statement will end with a full stop".".. Help Sharaf's brother to write the statement.

Input

Your program will be tested on one or more test cases. The first line of input will be a single integer T, the number of test cases (1 <= T <= 100). Followed by T lines, each line represents one test case, and consists of an integer N (1 <= N <= 100) which is the number of wrong answers.

Output

For each test case, print "Case_#i:_X" where "X" is the program output statement, "i" is the number of the test case (starting with 1) and "_" is a white space. Each output should be in a separate line.

Example

Input:

3

1

2 5

Output:

Case #1: Koko. Case #2: Koko,koko.

Case #3: Koko,koko,koko,koko,koko.