Challenge Number

Given a number N, your task is to print N, sum of digit of N, sum of the sum of digit of N, and so on until the result contains only one digit.

For example, consider N = 123456. Then:
Sum of digit of 123456 is 1 + 2 + 3 + 4 + 5 + 6 = 21.
Sum of the sum of digit of 123456 is sum of digit of 21 is 2 + 1 = 3.

Format Input
The first line contains an integer T - the number of test cases (1 <= T <= 100).
The second line contains an integer N (1 <= N <= 10^15).

Format Output
For each test case, print "Case #X: ", where X is the test case number followed by N, sum of digit of N, sum of the sum of digit of N, and so on until the result contains only one digit.

Constraints
1 <= T <= 100
1 <= N <= 10^{15}

Sample Input	Sample Output
2 18 5	Case #1: 18 9 Case #2: 5

Note
Please note that the output has no trailing space.