

10880 Colin and Ryan

"As a special bonus, if they order by midnight, what would they receive? Colin: They'd receive it earlier than if they'd ordered it later. Songs of the Butcher

Colin and Ryan had a party. They baked C cookies and invited G guests. Each guest ate Q cookies, and R cookies were left (R < Q).

Input

The first line of input gives the number of cases, N. N test cases follow. Each one is a line containing C and R (at most 2000000000).

Output

For each test case, output one line containing 'Case #x:' followed by Q — the number of cookies each guest ate. If there are multiple answers, print them in increasing order, separated by spaces. Do not print trailing spaces. Print a '0' in the case when R = C.

Sample Input

Sample Output

Case #1: 1 2 5 10 Case #2: 11 Case #3: 101 202 Case #4: