War Message

Naruto wants to inform about the the battle's current condition to headquarter at New York, NY 10017, United States, so he sends a message in encoded form so that it may not be misused. Help him.......

You will be given a string S (containing alphabets ,numbers and special characters any symbol present in keyboard)and a number n and you have to decode it with the following rules....

- Print the string starting from the first letter .
- jump n letters at a time.//after that subsequent nth letter will be printed till u reach the end
- after reaching the end start printing from the second letter and then follow the 2nd rule............and go so on.

- Stop printing when all the letters of the string have been printed.😛

Input

First line consist t (t<=100) number of test cases. Each test case includes a string S (|S|<=1000) and a number n(1<=n<=10^12) separated by space.

Output

Output a single line for each test case consisting of required string (string should contain only small letters) and the number of times the string have been traversed.

Example

Input:
3
AnkIt 3
RiddHi 2
ShuBHAnkAr 3
Output:
aintk 3
rdhidi 2
sbnrhhkuaa 3