Simple Encryption

In cryptography, encryption is the process of encoding a message. In this problem you have to encrypt the given message in English alphabet. You have to change a letter to n-th alphabet after itself. In this case, the next character after 'z' is character 'a'. Any character other than alphabet ('a' to 'z') will remain unchanged.

Format Input
The first line contain an integer T. The next T lines contain an integer N and message that you have to encrypt. It is guaranteed that the message will not be longer than 1000 characters.

Format Output
For each test case, print "Case #X: Y" where X represents the number of test case and Y represents the encrypted message.

Constraints
1 <= T <= 100
0 <= N <= 100

Sample Input 1	Sample Output 1
2 2 ABCDEFGHIJKLMNOPQRSTUVWXYZ 2 abcdefghijklmnopqrstuvwxyz	Case #1: CDEFGHIJKLMNOPQRSTUVWXYZAB Case #2: cdefghijklmnopqrstuvwxyzab

Sample Input 2	Sample Output 2
2 3 BINUS university 4 !@#$%^&*()qwertyuiopasdfghj	Case #1: ELQXV xqlyhuvlwb Case #2: !@#$%^&*()uaivxcymstewhjkln