[Are you confused] One way to confuse other people is to write a secret message out in row and then read the message out in column. Without knowing the length of a row, it is not easy to know what the original secret message is.

Here is an example to express the secret message "hello world!" with a row length of 3. The confusing message will then be "hlwleoodl r!". It will take a while for others to recover the original secret message from the confusing message.

h	е	1
1	0	
w	0	r
1	d	!

Column 1 = hlwl		
Column 2 = eood		
Column 3 = 1 r!		
Message = hlwleoodl r!		

Here is another example with a row length of 5, when some columns cannot be completely filled up. The remaining unused parts will not be included in the confusing message. Hence the final confusing message is "h dew!lolrol".

h	е	1	1	0
	w	0	r	1
d	!			

Column 1 = h d		
Column 5 = 01		
Message = h dew!lolrol		

Write a Python program to recover the original secret message from a confusing message in the first input line, when given the length of a row in the second input line. Print the recovered original message in the first output line and the length of the message in the second output line.

Sample input:	Sample output:
hlwleoodl r!	hello world!
3	12
hore llwdlo!	hello world!
4	12
H deW!lolrol	Hello World!
5	12
Oyo eoece nn nop rso etfteiwa	One way to confuse other people
esur ouhosr tatow sep is g wacer	is to write a secret message out
lttemei	in row
6	71
Ots iics noepstraie e eegn coot	One way to confuse other people
te wotpoa ranhl mooyfeewseuw	is to write a secret message out
ur rest	in row
8	71