1. Read length of input string, n. Read the input string. For each word w in the string, store the sum of ASCII values of letters in w in the variable s. Sum the digits of s and store it in d. If d > 26, keep updating d with the sum of digits of d until $d \le 26$.

When d gets a value less than or equal to 26, print the *dth* letter in the English alphabet.

Print *m*, the no. of distinct letters that have been printed.

For each distinct letter that has been printed, print which all words in the input string corresponded to that particular alphabet.

Sample Input 1:

3

life is beautiful

Sample Output 1:

kdp

3

k life

d is

p beautiful

Sample Input 2:

q

No heart is so hard as the timid heart

Sample Output 2:

rjdjjefmj

6

r No

j heart so hard heart

d is

e as

f the

m timid