1 Palindrome and Repdigit

Given a range of integers, write a program to identify numbers which are not palindromes and whose cube root is a repdigit. A repdigit is a number which is composed of same digit.

For example, the numbers between 10 and 99999 (inclusive) that are satisfying the conditions are 10648, 35937 and 85184 and their corresponding cube roots which are repdigits are 22, 33 and 44.

Boundary conditions
Upper bound of range of values can be 10^13(10 power 13)

Input Format
First line contains the lower bound value of the range, l
Next line contains the upper bound value of the range, u

Output Format
In one line print the number 'n' which is not a palindrome and its cube root which is a repdigit separated by a **space**

Print in ascending order of n.

Input/Output

Input	Output	
10 **99999** **Expected output**	**10648 22** **35937 33** **85184 44**	

50 **77777777**	**10648 22** **35937 33** **85184 44** **166375 55** **287496 66** **456533 77** **681472 88** **970299 99** **10941048 222** **36926037 333**	

2 Help the Kid to Gather Dolls

A game is organized for kids to collect the dolls that are put in 'n' boxes.
The boxes are numbered from 1 to n. The kid can move either forward or backward
and he has to make one step for moving to the next box or to the previous box.

The dolls are put in a box number one more than the number of letters that
lie outside the boundary made by the start and end letters.
For example, if the doll name is Edwina then it will be put in box number 4,
the boundary set by this doll name is a and e, letter 'd' lies within
the boundary whereas letters 'w', 'i' and 'n' lies outside the boundary
hence there are three letters that are outside boundary so doll will be put in box number 4.
Initially the kid stand at a place that is one step away from box number 1.

For example if six doll names Benedetta, Edwina, Gloria, Henriette, Laura and Marilee are
given to the kid then he has to make the following moves:

f 8

b 4

f 1

f 1

b 3

n 0

and totally 17 steps to pick all the dolls. ‘f’ indicates that he has to move
in the forward direction and ‘b’ indicates that the kid has to move in the backward direction,
‘n’ indicates that no need to move.

Given the list of dolls that has to be collected by a kid, write a program to
find out the direction and number of steps to be made by the kid and
also the total number of steps he has to make to pick all the dolls.

Boundary conditions

Doll names can be length 30

Mixed cases will be used in doll names

Input format:

First line contains the number of dolls given for the kid, n

Next ‘n’ lines contain the name of the dolls

Output Format:

For each doll name print the direction of move and number of steps to be
moved separated by a **space**(‘f’ indicates forward,
‘b’ indicates backward move and ‘n’ indicates ‘no move’)

Print the total number of steps to be made by the kid to pick all the dolls

Input/Output

Input	Output	
6 Benedetta Edwina Gloria Henriette Laura Marilee	f 8 b 4 f 1 f 1 b 3 n 0 17	
13 Laura Marilee Edwina Benedetta Edwina Gloria Henriette Edwina Laura Gloria Marilee Gloria Gloria	f 3 n 0 f 1 f 4 b 4 f 1 f 1 b 2 b 1 f 2 b 2 f 2 n 0 23	