

Five Special Letters

We are given two numbers: **start** and **end**. Write a program to **generate all sequences of 5 letters**, each from the set { 'a', 'b', 'c', 'd', 'e' }, such that the weight of these 5 letters is a number in the range [start ... end] inclusively. Print them in alphabetical order, in a single line, separated by a space.

The **weight of a single letter** is calculated as follows: weight('a') = 5; weight('b') = -12; weight('c') = 47; weight('d') = 7; weight('e') = -32. The **weight of a sequence** of letters $c_1c_2...c_n$ is calculated by first removing all repeating letters (from right to left) and then calculate the formula:

$$\text{weight}(c_1c_2...c_n) = 1*\text{weight}(c_1) + 2*\text{weight}(c_2) + ... + n*\text{weight}(c_n)$$

For example, the weight of "bcddc" is calculated as follows: First we remove the repeating letters and we get "bcd". Then we apply the formula: $1*\text{weight}('b') + 2*\text{weight}('c') + 3*\text{weight}('d') = 1*(-12) + 2*47 + 3*7 = 103$. Another example: $\text{weight}(\text{"cadea"}) = \text{weight}(\text{"cade"}) = 1*47 + 2*5 + 3*7 - 4*32 = -50$.

Input

The input data should be read from the console. It will consist of 2 lines:

- The number **start** stays at the first line.
- The number **end** stays at the second line.

The input data will always be valid and in the format described. There is no need to check it explicitly.

Output

The output should be printed on the console as a sequence of strings in **alphabetical order**. Each string should be separated than the next string by a single space. In case no 5-letter strings exist with a weight in the specified range, print "No".

Constraints

- The numbers **start** and **end** will be an **integers** in the range [-10000...10000].
- Allowed working time for your program: 0.25 seconds.
- Allowed memory: 16 MB.

Examples

Input	Output	Comments
40	bcead bdcea	$\text{weight}(\text{"bcead"}) = 41$
42		$\text{weight}(\text{"bdcea"}) = 40$

Input	Output
-1	bcdea cebda eaaad eaada
1	eaadd eaade eaaed eadaa
	eadad eadae eadda eaddd
	eadde eadea eaded eadee
	eaead eaeda eaedd eaede
	eaees eaaad eeada eeadd
	eeade eeaed eeea

Input	Output
200	baadc babdc badac badbc
300	badca badcb badcc badcd
	baddc bbadc bbdac bdaac
	bdabc bdaca bdacb bdacc
	bdacd bdadc bdbac bddac
	beadc bedac eabdc ebadc
	ebdac edbac

Input	Output
300	No
400	