"A string is traditionally a sequence of characters, either as a literal constant or as some kind of variable." — <u>Wikipedia: String (computer science)</u>

This exercise is to test your understanding of Java Strings. A sample *String* declaration:

String myString = "Hello World!"

The elements of a *String* are called *characters*. The number of *characters* in a *String* is called the *length*, and it can be retrieved with the *String.length()* method.

Given two strings of lowercase English letters, \boldsymbol{A} and \boldsymbol{B} , perform the following operations:

- 1. Sum the lengths of \boldsymbol{A} and \boldsymbol{B} .
- 2. Determine if A is lexicographically larger than B (i.e.: does B come before A in the dictionary?).
- 3. Capitalize the first letter in \boldsymbol{A} and \boldsymbol{B} and print them on a single line, separated by a space.

Input Format

The first line contains a string \boldsymbol{A} . The second line contains another string \boldsymbol{B} . The strings are comprised of only lowercase English letters.

Output Format

There are three lines of output:

For the first line, sum the lengths of A and B.

For the second line, write Yes if \boldsymbol{A} is lexicographically greater than \boldsymbol{B} otherwise print No instead. For the third line, capitalize the first letter in both \boldsymbol{A} and \boldsymbol{B} and print them on a single line, separated by a space.

Sample Input 0

hello iava

Sample Output 0

9 No Hello Java

Explanation 0

String $m{A}$ is "hello" and $m{B}$ is "java".

 ${\pmb A}$ has a *length* of ${\pmb 5}$, and ${\pmb B}$ has a *length* of ${\pmb 4}$; the sum of their lengths is ${\pmb 9}$. When sorted alphabetically/lexicographically, "hello" precedes "java"; therefore, ${\pmb A}$ is not greater than ${\pmb B}$ and the answer is No.

When you capitalize the first letter of both ${\pmb A}$ and ${\pmb B}$ and then print them separated by a space, you get "Hello Java".