import java.util.Scanner;

public class StringRunner {

public static void main(String[] args) {

Scanner scan = new Scanner(System.*in*);

// obtain first string from user

System.*out*.print("Enter first string: ");

String string1 = scan.nextLine();

// get string length and print it out

int string1Length = string1.length();

System.*out*.println("String length: " + string1Length);

// calculate "halfway" index, which is the length divided by 2 (int division!)

int halfIndex = string1Length / 2;

// get the first half and second half substrings, then print each out

String firstHalf = string1.substring(0, halfIndex); // two-parameter version

String secondHalf = string1.substring(halfIndex); // one-parameter version

System.*out*.println("First half: " + firstHalf);

System.*out*.println("Second half: " + secondHalf);

// obtain second string from user

System.*out*.print("Enter second string: ");

String string2 = scan.nextLine();

// get second string length, then compare and print which is longer

int string2Length = string2.length();

if (string1Length > string2Length) {

System.*out*.println(string1 + " is longer");

} else if (string2Length > string1Length) {

System.*out*.println(string2 + " is longer");

} else {

System.*out*.println("Both strings have the same length");

}

// determine if strings are "equal", and if so, print that out

if (string1.equals(string2)) {

System.*out*.println("Both strings have the exact same characters");

} else { // if NOT, then one must come before the other

int compare = string1.compareTo(string2);

if (compare < 0) { // if string1.compareTo(string2) is negative, string1 is alphabetically first

System.*out*.println(string1 + " is first alphabetically");

} else { // otherwise, string2 is alphabetically first

System.*out*.println(string2 + " is first alphabetically");

}

}

// determine index where string2 occurs in string1, then print out appropriate message

int indexOfSecondString = string1.indexOf(string2);

if (indexOfSecondString != -1) {

System.*out*.println(string2 + " is found in " + string1 + " at index " + indexOfSecondString);

} else {

System.*out*.println(string2 + " is NOT found in " + string1);

}

}

}