**mport java.util.Scanner;**

**public class two\_strings\_lowercase\_irrepeatable\_chs\_input\_same\_ch\_excluded\_output\_string{**

**public static void main(String[] args) {**

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

**System.out.print("Enter two strings: ");**

**String word1 = in.nextLine();**

**String word2 = in.nextLine();**

**String lower\_word1 = word1.toLowerCase();**

**String lower\_word2 = word2.toLowerCase();**

**int candidate\_not\_equal;**

**char[] word1st = lower\_word1.toCharArray();**

**char[] word2nd = lower\_word2.toCharArray();**

**String new\_word = "";**

**// Process first string**

**for (int i = 0; i < word1st.length; i++) {**

**candidate\_not\_equal = 0;**

**char candidate = word1st[i];**

**for (int j = 0; j < word2nd.length; j++) {**

**char target = word2nd[j];**

**if (candidate != target) {**

**candidate\_not\_equal += 1;**

**} else {**

**break; // found common character, stop inner loop**

**}**

**}**

**if (candidate\_not\_equal == word2nd.length) {**

**new\_word += candidate;**

**}**

**}**

**// Process second string**

**for (int i = 0; i < word2nd.length; i++) {**

**candidate\_not\_equal = 0;**

**char candidate = word2nd[i];**

**for (int j = 0; j < word1st.length; j++) {**

**char target = word1st[j];**

**if (candidate != target) {**

**candidate\_not\_equal += 1;**

**} else {**

**break; // found common character, stop inner loop**

**}**

**}**

**if (candidate\_not\_equal == word1st.length) {**

**new\_word += candidate;**

**}**

**}**

**System.out.println("The final string is: " + new\_word);**

**in.close();**

**}**

**}**