import java.util.\*;

import java.util.Scanner;

public class AnagramFinder {

public static List<Integer> findAnagrams(String s, String p) {

List<Integer> result = new ArrayList<>();

// Edge case: if p is longer than s, no anagram can exist

if (s.length() < p.length()) {

return result;

}

// Frequency array for p

int[] pCount = new int[26];

for (char c : p.toCharArray()) {

pCount[c - 'a']++;

}

// Frequency array for the current window in s

int[] windowCount = new int[26];

int left = 0;

// Slide the window over string s

for (int right = 0; right < s.length(); right++) {

// Include the current character in the window

windowCount[s.charAt(right) - 'a']++;

// If the window size is greater than p's size, shrink the window

if (right - left + 1 > p.length()) {

windowCount[s.charAt(left) - 'a']--;

left++;

}

// If the window matches the frequency of p, we found an anagram

if (Arrays.equals(pCount, windowCount)) {

result.add(left);

}

}

return result;

}

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

// Get input strings from the user

System.out.print("Enter the string s: ");

String s = scanner.nextLine();

System.out.print("Enter the string p: ");

String p = scanner.nextLine();

// Find the anagrams

List<Integer> anagramIndices = findAnagrams(s, p);

// Output the results

System.out.println("Anagram start indices: " + anagramIndices);

scanner.close();

}

}