https://course.acciojob.com/idle?question=52608106-14b6-4ef3-8407-ad897b58c7a9

- MEDIUM
- Max Score: 40 Points
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Find All Anagrams

Given two strings `s` and `p`, return an array of all the start indices of p's anagrams in s.

An Anagram is a word or phrase formed by rearranging the letters of a different word or phrase, typically using all the original letters exactly once.

Input Format:

First line contains string `s`.

Second line contains string `p`.

Output Format:

Return all the starting indexes of `p's` anagram in `s` in sorted order.

Example 1

Input

```
cbaebabacd
abc
```

Output

```
0 6
```

Explanation

```
The substring with start index = 0 is `cba`, which is an anagram of `abc`.
The substring with start index = 6 is `bac`, which is an anagram of `abc`.
```

Example 2

Input

```
abab
ab
```

Output

```
0 1 2
```

Explanation

```
The substring with start index = 0 is `ab`, which is an anagram of `ab`.
The substring with start index = 1 is `ba`, which is an anagram of `ab`.
The substring with start index = 2 is `ab`, which is an anagram of `ab`.
```

Constraints

`1 <= s.length, p.length <= 3 * 10^4`

`s` and `p` consists of lowercase English letters.

Topic Tags

- Hashing
- Strings
- Sliding Window

My code

```
// n java
/*import java.util.*;
import java.lang.*;
import java.io.*;

public class Main
{
	static boolean isana(String st, String str,int k)
	{
		HashMap <Character,Integer>hm=new  HashMap<>();
		 for(int i=0;i<k;i++)
			{
				char ch=st.charAt(i);
				hm.put(ch,hm.getOrDefault(ch,0)+1);
			}
		 for(int i=0;i<k;i++)
			{
				char ch=str.charAt(i);
				hm.put(ch,hm.getOrDefault(ch,0)-1);
			}
		 for(int x:hm.values())
			{
				if(x!=0)
					return false;
			}
		 return true;
	}
```

```
	public static void main (String[] args) throws
java.lang.Exception
	{
		//your code here
		Scanner s=new Scanner(System.in);
		int n=s.nextInt();
		String str=s.next();
		int k=s.nextInt();
		String st=s.next();
		int c=0;
		for(int i=0;i<=n-k;i++)
			{
				if(isana(st,str.substring(i,i+k),k))
				System.out.print(i+" ");
			  }
	}
}*/
import java.util.*;
import java.lang.*;
import java.io.*;

public class Main
{
	public static void main (String[] args) throws
java.lang.Exception
	{
		//your code here
		Scanner sc  = new Scanner(System.in);
		int N = sc.nextInt();
		String s = sc.next();
```

```
        int M = sc.nextInt();
        String p = sc.next();
        if (M>N) {
            System.out.print(-1);
            return;
        }
  if (p.length()>s.length()) {
    return;
  }

  HashMap<Character, Integer> hm1 = new HashMap<>();
            for (int j=0; j<M; j++) {
                char ch = p.charAt(j);
                hm1.put(ch,hm1.getOrDefault(ch,0)+1);
            }
  HashMap<Character, Integer> hm2 = new HashMap<>();
int j = 0;
int i = 0;
        for (i=0; i<N; i++) {
    if (hm1.equals(hm2)) {
      System.out.print(i-p.length()+" ");

    }
    if (i<p.length()) {
      hm2.put(s.charAt(i),hm2.getOrDefault(s.charAt(i),0)+1);
    }
    else {
      hm2.put(s.charAt(i),hm2.getOrDefault(s.charAt(i),0)+1);
      hm2.put(s.charAt(j),hm2.get(s.charAt(j))-1);
```

```
            if (hm2.get(s.charAt(j))==0) {
              hm2.remove(s.charAt(j));
            }
             j++;
          }
          //System.out.println(hm2);
               }
      if (hm1.equals(hm2)) {
          System.out.print(i-p.length()+" ");
       }
       }
}
```