

String Matching

Problem ID: stringmatching

CPU Time limit: 1 second

Memory limit: 1024 MB


Difficulty: 4.7

Input

The input consists of several test cases. Each test case consists of two lines, first a non-empty pattern, then a non-empty text. Input is terminated by end-of-file. The input file will not be larger than 5 Mb.

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Source: KTH CSC Popup 2005

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Output

For each test case, output one line containing the positions of all the occurrences of pattern in text, from first to last, separated by a single space.

Sample Input 1

```
p
Popup
helo
Hello there!
peek a boo
you speak a bootiful language
anas
bananananas paj
```

Sample Output 1

```
2 4
5
7
```