Coding Assignment

Duration: 3 Hours

Instructions

- This assignment has to be implemented using your preferred programming language.
- Use of Internet is allowed for referring to programming language related syntax and troubleshooting.
- After finishing the assignment, candidates are requested to PUSH the codebase and related artifacts to GitHub Public Repository and share the public link of GitHub Repository with the respective coordinator from Flentas Solutions.

Problem Statements

Sherlock Holmes is working on a case. One day going through evidence, he finds some scribbled text at corner of victim's diary. Now Sherlock believes that the scribbled text has something to do with the clue leading to Murderer, so he decides to find every occurrence of all the permutations of the scribbled text in the entire book. Since this is a huge task, he needs your help, he needs you to figure out if any permutation of the scribbled text exists in the given text string, so he can save time with the case. Permutation means any sequence of the string.

Input Format

First line contains number of test cases T. Each test case contains two lines, first line contains pattern and next line contains a text string. All characters in both the strings are in lowercase only [a-z].

Constraints

$1 \leq T \leq 100$

$1 \leq |\text{Pattern}| \leq 1000$

$1 \leq |\text{Text String}| \leq 100000$

Output Format

For each test case print "YES" or "NO", depending on whether any permutation/sequence of the pattern exists in the text string.

Sample Input

```
3
hack
indiahacks
code
eddy
coder
iamredoc
```

Sample Output

```
YES
NO
YES
```