



Longest Common Subsequence (LCS)

Given two sequences, find the length of longest subsequence present in both of them. Both the strings are of uppercase.

Input:

First line of the input contains no of test cases **T**, the **T** test cases follow.

Each test case consist of 2 space separated integers **A** and **B** denoting the size of string **str1** and **str2** respectively

The next two lines contains the 2 string **str1** and **str2**.

Output:

For each test case print the length of longest common subsequence of the two strings.

Constraints:

$1 \leq T \leq 200$

$1 \leq \text{size}(\text{str1}), \text{size}(\text{str2}) \leq 100$

Example:

Input:

```
2
6 6
ABCDGH
AEDFHR
3 2
ABC
AC
```

Output:

```
3
2
```

Explanation

LCS for input Sequences "ABCDGH" and "AEDFHR" is "ADH" of length 3.

LCS of "ABC" and "AC" is "AC" of length 2