

Edit Distance

The Problem

Calculate the Levenshtein Distance between two strings x and y . The cost of deletion is 1, the cost of insertion is 1, and the cost of substitution is 1.

The Input

The input begins with a line containing a single integer, T , the number of test cases which follow. For each test case, two lines of text, each with length between 0 and 1000 follow.

The Output

For each test case output the Levenshtein Distance between the two strings on a line by itself.

Sample Input

```
4
polynomial
exponential
virtual
ritual
four
```

```
four
```

Sample Output

```
6
2
4
4
```