

DIFF TEXT PROCESSING UTILITY

While diff is a useful text processing utility that finds the difference between contents of files, this baby diff will start out as a simplistic check, counting how many of the leading characters of two lines of text are the same. The hopes and dreams of this program is to grow up into a full-fledged utility, but for now, it starts small.

The input file **diff.txt** will start off with a number representing the number of sets of two lines. Each line will be a non-empty string less than 255 characters long.

The output will contain integers $0 \leq i \leq 255$ where i is the number of leading characters that are the same between the two lines, up to the first difference.

Note: the two lines could be of different length. The counter stops before the first character that doesn't match, so two strings that start differently would be a result of 0.

Sample input data (diff.txt)

```
5
tony
tony
dan
tony
one two three
one two four
a
b
abcd
abcde
```

Sample Output:

```
4
0
8
0
4
```

Data Set 1 – Input

7
st. jean de brebeuf
st. thomas more
carol
carolling
hamilton ontario
hamilton ontario canada
abc
abcd
you said she said
you said he said
programming
programmi
x
y

Data Set 1 -Output (100 marks 15 each last one 10)

4
5
16
3
9
9
0

Data Set 2 – Input

5
tony tony tony
tony tony tom
daniel
tony
one two three
one two thr
a
b
abcd
abcde

Data Set 2 – Output (100 marks - 20 each)

12
0
11
0
4