

Problem 5—Klingon ROT13

The Klingons have their own code to confound the Federation. They replace each letter with the corresponding letter from the other end of the alphabet. A's become Z's. B's become Y's, etc. Capital letters are replaced with capital letters. Lowercase letters are replaced with lowercase letters. All other characters are transmitted normally. Given a message, you are to encode it in Klingon ROT13.

Note: if you are thinking that this isn't really ROT13, you are probably thinking of *Federation* ROT13. This is *Klingon* ROT13.

INPUT SPECIFICATION. Each input case will be a string of positive length followed by <EOLN>. The last input case will be followed by an extra <EOLN>.

OUTPUT SPECIFICATION. The output cases should appear in the same order as the input cases. Each output case should be in the form “Case *c*: *s*” where *c* is the case number and *s* is the encoded string. Each output case should be followed by one <EOLN>.

SAMPLE INPUT.

```
The·quick·brown·fox·jumped·over·the·lazy·dogs·<EOLN>
abcdefghijklmnopqrstuvwxyz<EOLN>
<EOLN>
<EOF>
```

SAMPLE OUTPUT.

```
Case·1:·Gsv·jfrxp·yildm·ulc·qfnkvw·levi·gsv·ozab·wlth·<EOLN>
Case·2:·zyxwvutsrqponmlkjihgfedcba<EOLN>
<EOF>
```