Your new game console has finally arrived. Before diving into your favorite game, you have to confirm that you are not a robot – these Captchas are everywhere! For the last Captcha you have to use your joystick. Two arbitrary strings are given, s and f, consisting of lowercase Latin letters. You have to transform the first one (s) into the second one (f). It is allowed to change every letter of s with the help of the controller – moving it up or down. This way, you choose the next or the previous letter in the alphabet with respect to the current one. The alphabet is cyclic, i.e. the letter before ‘a’ is ‘z‘, and the letter after ‘z’ is ‘а‘.

You cannot wait to start playing and that is why you want to find the smallest number of joystick movements you have to do, so that this Captcha will disappear.

**Input**

The first line of the file **controller.in** reads 2 strings with the same length – s and f.

**Output**

Print the desired number on the first line of the file **controller.out**.

**Constraints**

, where |x| denotes the length of x.

**Time limit: 0.1 sec.**

**Memory limit: 256 MB**

**Sample test**

|  |  |
| --- | --- |
| **Input (controller.in)** | **Output (controller.out)** |
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