# Test Word Scramble Score

Given the problem below, we have two candidate solutions. Your job is to:

* Describe your test approach and why you are taking this approach
* For one of the solutions, provide an automated regression suite and your results
* Describe why you chose to test the solution that you did for testing
* Describe, from a testing viewpoint, key differences, deficiencies or other notable comments about the differences between the two designs

## The Problem Statement

A popular item in the local paper is the word scramble. In this puzzle, a reader is presented with a series of letters that are for a scrambled word, e.g. “rwod” can be unscrambled to “word”. We need to have a program that will score the difficulty of any particular scrambling of a word. The scores can be not, poor, fair or hard, depending on whether or not the scramble is not scrambled, easy to solve, a reasonable difficulty to solve or hard to solve, respectively.

Word scrambles can be judged by a set of heuristics including if the word looks real or if the scramble has letters in the correct place. A scramble looks like a real word if the letters alternate between vowels and consonants (with ‘Y’ being a vowel for this purpose). However, certain combinations of vowels and consonants are allowed:

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| AI | AY | EA | EE | EO | IO | OA | OO | OY | YA |
| YO | YU | BL | BR | CH | CK | CL | CR | DR | FL |
| FR | GH | GL | GR | KL | KR | KW | PF | PL | PR |
| SC | SCH | SCR | SH | SHR | SK | SL | SM | SN | SP |
| SQ | ST | SW | TH | THR | TR | TW | WH | WR |  |

Also, all double consonants are allowed, and, no other combinations are allowed. For instance, SWR doesn’t look real even though both SW and WR are independently looking real.

Word classifications:

* Not – if the word is not scrambled at all
* Poor – if the first letter or any two consecutive letters are in the correct place and the word doesn’t look real
* Hard – if none of the letters are in the correct place and the word looks real
* Fair – for all other cases

## INPUT

A list where each element is a scramble followed by a space followed by the actual word. The characters are expected to be in upper case.

## OUTPUT

* For not – “<scrambled> is not a scramble of <word>”
* For poor – “<scrambled> is a poor scramble of <word>”
* For fair – “<scrambled> is a fair scramble of <word>”
* For hard – “<scrambled> is a hard scramble of <word>”

### SAMPLE INPUT:

MAPS SPAM

RIONY IRONY

ONYRI IRONY

IRONY IRONY

INOYR IRONY

IOYRN IRONY

### EXPECTED OUTPUT:

MAPS is a fair scramble of SPAM

RIONY is a fair scramble of IRONY

ONYRI is a hard scramble of IRONY

IRONY is not a scramble of IRONY

INOYR is a fair scramble of IRONY

IOYRN is a poor scramble of IRONY