

Assignment Expectations:

- Please spend approximately one hour on this task
- Feel free to write code in whatever language you're comfortable with (preferably javascript or python)
- The code should be able to be run without error. Let us know how to run your script so we can see it work
- If you have any questions about this assignment, please reach out to jhiggins@lcvista.com

CODING ASSIGNMENT: Word Scores

Please write a script that takes in a word and returns its score based on the following rules:

- Rule 1: Each letter initially gets a score based on its location in the alphabet (a=1, b=2, etc...)
- Rule 2: If a consonant appears to the left of a vowel, its score is halved (round up to the nearest integer)
- Rule 3: If a vowel appears next to another vowel, its value is squared.
- Rule 4: The letter Y is considered a vowel if there are no other vowels in the word.
- Rule 5: After calculating the letter score, apply an exponent equal to the number of times the most-repeated letter appears

Examples:

- agree

a g r e e

$$(1 + 7 + 18/2 + 5^2 + 5^2)^2 = 4489$$

- intelligently

i n t e l l i g e n t l y

$$(9 + 14 + 20/2 + 5 + 12 + 12/2 + 9 + 7/3 + 5 + 14 + 20 + 12 + 25)^3 = 3048625$$

Please use this list of the 1000 (Ten Hundred: <https://xkcd.com/thing-explainer/>) most common words in the English language for testing: <https://splasho.com/upgoer5/phpspellcheck/dictionaries/1000.dic>

BONUS ROUND (Modifying Rule 1):

- Each letter initially gets a score based on its location in the alphabet starting with the first letter of the word (gym = [g=1, h=2, i=3, etc..., e=25, f=26]) Example:

- zoo

z o o

$$(1 + 16^2 + 16^2)^2 = 263169$$

BONUS BONUS ROUND:

- Please write unit tests for all functions used to solve the above.