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Problem 1 - Word Scores

Problem 1 - Word Scores

0.0/10.0 points (graded)

The first step is to implement some code that allows us to calculate the score for a single word. The function `getWordScore` should accept as input a string of lowercase letters (a *word*) and return the integer score for that word, using the game's scoring rules.

A Reminder of the Scoring Rules

Scoring

- The score for the hand is the sum of the scores for each word formed.
- The score for a word is the sum of the points for letters in the word, multiplied by the length of the word, plus 50 points if all n letters are used on the first word created.
- Letters are scored as in Scrabble; A is worth 1, B is worth 3, C is worth 3, D is worth 2, E is worth 1, and so on. We have defined the dictionary `SCRABBLE_LETTER_VALUES` that maps each lowercase letter to its Scrabble letter value.
- For example, 'weed' would be worth 32 points $((4+1+1+2)$ for the four letters, then multiply by `len('weed')` to get $(4+1+1+2)*4 = 32$). Be sure to check that the hand actually has 1 'w', 2 'e's, and 1 'd' before scoring the word!
- As another example, if $n=7$ and you make the word 'waybill' on the first try, it would be worth 155 points (the base score for 'waybill' is $(4+1+4+3+1+1+1)*7=105$, plus an additional 50 point bonus for using all n letters).



Hints

- You may assume that the input `word` is always either a string of lowercase letters, or the empty string `""`.
- You will want to use the `SCRABBLE_LETTER_VALUES` dictionary defined at the top of `ps4a.py`. You should not change its value.
- Do **not** assume that there are always 7 letters in a hand! The parameter `n` is the number of letters required for a bonus score (the maximum number of letters in the hand). Our goal is to keep the code modular - if you want to try playing your word game with $n=10$ or $n=4$, you will be able to do it by simply changing the value of `HAND_SIZE`!
- **Testing:** If this function is implemented properly, and you run `test_ps4a.py`, you should see that the `test_getWordScore()` tests pass. Also test your implementation of `getWordScore`, using some reasonable English words.

Fill in the code for `getWordScore` in `ps4a.py` and be sure you've passed the appropriate tests in `test_ps4a.py` before pasting your function definition here.

```
1 def getWordScore(word, n):
2     """
3     Returns the score for a word. Assumes the word is a valid word.
4
5     The score for a word is the sum of the points for letters in the
6     word, multiplied by the length of the word, PLUS 50 points if all n
7     letters are used on the first turn.
8
9     Letters are scored as in Scrabble; A is worth 1, B is worth 3, C is
10    worth 3, D is worth 2, E is worth 1, and so on (see SCRABBLE_LETTER
11
12    word: string (lowercase letters)
13    n: integer (HAND_SIZE; i.e., hand size required for additional poin
14    returns: int >= 0
15    """
```

Press ESC then TAB or click outside of the code editor to exit

Unanswered



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Problem 1 - Word Scores

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<div><div>💬</div><div><u>spolier</u></div><div>if you want to get at least one right type in this: <code>def getWordScore(word, n): ""</code> Returns the sc...</div><div>1</div></div>	
<div><div>💬</div><div><u>Easily readable way to use lambda in this problem?</u></div><div>I'm trying to work on using map and lambda just to get more familiar with them. I found a wa...</div><div>2</div></div>	
<div><div>?</div><div><u>Hand_size vs n</u></div><div>I got the answer correct but I am wondering why I got it wrong at first. Why can't I use HAND ...</div><div>4</div></div>	
<div><div>💬</div><div><u>what delimiter is used in the function ps4a.py</u></div><div>I'm not able to understand how the program is distinguishing the meaningful words from the...</div><div>1</div></div>	
<div><div>💬</div><div><u>The code runs and returns the proper value for word score on IDE and PythonTutor but not in Grader</u></div><div>The code runs as intended on both my IDE and tutor but when I run the test or submit via gr...</div><div>3</div></div>	
<div><div>💬</div><div><u>For the one who loads and writes code in jupyter notebook and find test_ps4a.py always return None</u></div><div>It tooks me a while to figure out the problem. I loaded .py file and writed the code on jupyter ...</div><div>3</div></div>	
<div><div>?</div><div><u>Importing module ps4a into my code</u></div><div>Dear friends, My code works in Spyder properly, but when I paste it in the grader, I get the fol...</div><div>2</div></div>	
<div><div>?</div><div><u>Heads up for test_ps4a.py</u></div><div>The code does not run in any sensible manner in the pycharm IDE on Linux but works fine on...</div><div>2</div></div>	
<div><div>?</div><div><u>Code runs fine in Jupyter notebook but returns wrong results in the grader</u></div><div>I can't understand what I am getting wrong as when I use the code in Jupyter notebook, it wo...</div><div>5</div></div>	
<div><div>?</div><div><u>how could I know if it is the first word created in order to plus extra 50 points?</u></div><div>In my code,all I did is simply to judge whether the length of word equals n,but this doesn't e...</div><div>5</div></div>	

?	Is it possible or how to use dictionary (both keys and values) for this question?	1
	I have added 2 local variables for counting and scoring, a for loop and d[key] to tally the scor...	
💬	Reloading Module:: Potential Solution to test_ps4a	3
	I was having the problem where my code was working (10/10), but test_psf4a would still mar...	
?	Problem importing ps4a file	2
	I created a second file named ps4a_1(copy of the original file, just changed the name) and tri...	
?	Incorrect result	2
	((Please do not post lines of PSET code)) ((Instead, describe the problem and all of the error ...	
?	Should I use assertions?	1
	Hi, my question is: should I assert the things that are assumed - that input *word* is always e...	
💬	Implement this function within two lines	3
	Using list comprehension and one line if-condition-assignment, this function can be impleme...	
💬	Assessment not responding? When pasting your code, beware of double-indenting your first line	1
	I coded and tested in Spyder, I copied the code into the assessment window so my first line w...	
💬	Tip for those testing on their own machines	1
	I was wondering why `test_ps4a.py` was still marking my function incorrectly when running ...	
✓	using test_ps4a.py	6
	I'm getting 10/10 points from the tests, but somehow everytime that I run the test_ps4a.py, I ...	
✓	IndentationError: expected an indented block	4
	Hí, when running my code I get "IndentationError: expected an indented block" It seems the ...	
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