



On Thursday, February 16th at 6:00AM EST, UTC-5, we will be conducting a brief database maintenance. The event should last about 5 minutes.



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**Problem Set 4**

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## Problem 5 - Playing a Hand

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### Problem 5 - Playing a Hand

10.0 points possible (graded)

In `ps4a.py`, note that in the function `playHand`, there is a bunch of *pseudocode*. This pseudocode is provided to help guide you in writing your function. Check out the [Why Pseudocode?](#) resource to learn more about the What and Why of Pseudocode before you start coding your solution.

**Note:** Do **not** assume that there will always be 7 letters in a hand! The parameter `n` represents the size of the hand.

**Testing:** Before testing your code in the answer box, try out your implementation as if you were playing the game. Here is some example output of `playHand`:


#### Test Cases

##### Case #1

Function Call:

```
wordList = loadWords()
playHand({'h':1, 'i':1, 'c':1, 'z':1, 'm':2, 'a':1},
wordList, 7)
```

Output:

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```
Current Hand:  a c i h m m z
Enter word, or a "." to indicate that you are finished:
him
"him" earned 24 points. Total: 24 points

Current Hand:  a c m z
Enter word, or a "." to indicate that you are finished:
cam
"cam" earned 21 points. Total: 45 points

Current Hand:  z
Enter word, or a "." to indicate that you are finished:
.
Goodbye! Total score: 45 points.
```

### Case #2

Function Call:

```
wordList = loadWords()
playHand({'w':1, 's':1, 't':2, 'a':1, 'o':1, 'f':1},
wordList, 7)
```

Output:

```
Current Hand:  a s t t w f o
Enter word, or a "." to indicate that you are finished:
tow
"tow" earned 18 points. Total: 18 points

Current Hand:  a s t f
Enter word, or a "." to indicate that you are finished:
tasf
Invalid word, please try again.

Current Hand:  a s t f
Enter word, or a "." to indicate that you are finished:
fast
"fast" earned 28 points. Total: 46 points

Run out of letters. Total score: 46 points.
```

### Case #3

Function Call:

```
wordList = loadWords()
playHand({'n':1, 'e':1, 't':1, 'a':1, 'r':1, 'i':2},
wordList, 7)
```

Output:

```
Current Hand: a r e t i i n
Enter word, or a "." to indicate that you are finished:
inertia
"inertia" earned 99 points. Total: 99 points

Run out of letters. Total score: 99 points.
```

### Additional Testing

Be sure that, in addition to the listed tests, you test the same basic test conditions with varying values of `n`. `n` will never be smaller than the number of letters in the hand.

```
1 def playHand(hand, wordList, n):
2     """
3     Allows the user to play the given hand, as follows:
4
5     * The hand is displayed.
6     * The user may input a word or a single period (the string
7       to indicate they're done playing
8     * Invalid words are rejected, and a message is displayed a
9       the user to choose another word until they enter a valid
10    * When a valid word is entered, it uses up letters from th
11    * After every valid word: the score for that word is displ
12      the remaining letters in the hand are displayed, and the
13      is asked to input another word.
14    * The sum of the word scores is displayed when the hand fi
15    * The hand finishes when there are no more unused letters
16    inputs a "."
```

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

Unanswered

Submit

You have used 0 of 30 attempts

## Problem 5 - Playing a Hand

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