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shengtatng ~

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## **Problem 6 - Playing a Game**

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### Problem 6 - Playing a Game

15.0/15.0 points (graded)

A game consists of playing multiple hands. We need to implement one final function to complete our word-game program. Write the code that implements the <code>playGame</code> function. You should remove the code that is currently uncommented in the <code>playGame</code> body. Read through the specification and make sure you understand what this function accomplishes. For the game, you should use the <code>HAND\_SIZE</code> constant to determine the number of cards in a hand.

**Testing:** Try out this implementation as if you were playing the game. Try out different values for <code>HAND\_SIZE</code> with your program, and be sure that you can play the wordgame with different hand sizes by modifying *only* the variable <code>HAND\_SIZE</code>.

#### **Sample Output**

#### Here is how the game output should look...

```
Loading word list from file...
   83667 words loaded.
Enter n to deal a new hand, r to replay the last hand, or e to end game: r
You have not played a hand yet. Please play a new hand first!
Enter n to deal a new hand, r to replay the last hand, or e to end game: n
Current Hand: p z u t t t o
Enter word, or a "." to indicate that you are finished: tot
"tot" earned 9 points. Total: 9 points
Current Hand: p z u t
Enter word, or a "." to indicate that you are finished: .
Goodbye! Total score: 9 points.
Enter n to deal a new hand, r to replay the last hand, or e to end game: r
Current Hand: p z u t t t o
Enter word, or a "." to indicate that you are finished: top
"top" earned 15 points. Total: 15 points
Current Hand: z u t t
Enter word, or a "." to indicate that you are finished: tu
Invalid word, please try again.
Current Hand: z u t t
Enter word, or a "." to indicate that you are finished: .
Goodbye! Total score: 15 points.
Enter n to deal a new hand, r to replay the last hand, or e to end game: n
Current Hand: a q w f f i p
Enter word, or a "." to indicate that you are finished: paw
"paw" earned 24 points. Total: 24 points
Current Hand: q f f i
Enter word, or a "." to indicate that you are finished: qi
"qi" earned 22 points. Total: 46 points
Current Hand: f f
Enter word, or a "." to indicate that you are finished: .
Goodbye! Total score: 46 points.
Enter n to deal a new hand, r to replay the last hand, or e to end game: n
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.
Enter n to deal a new hand, r to replay the last hand, or e to end game: x
Invalid command.
Enter n to deal a new hand, r to replay the last hand, or e to end game: e
```



#### Hints about the output

Be sure to inspect the above sample output carefully - very little is actually printed out in this function specifically. Most of the printed output actually comes from the code you wrote in playHand - be sure that your code is modular and uses function calls to the playHand helper function!

You should also make calls to the <code>dealHand</code> helper function. You shouldn't make calls to any other helper function that we've written so far - in fact, this function can be written in about 15-20 lines of code.

Here is the above output, with the output from playHand obscured:

```
Loading word list from file...

83667 words loaded.
Enter n to deal a new hand, r to replay the last hand, or e to end game: r
You have not played a hand yet. Please play a new hand first!

Enter n to deal a new hand, r to replay the last hand, or e to end game: n
<call to playHand>

Enter n to deal a new hand, r to replay the last hand, or e to end game: n
<call to playHand>

Enter n to deal a new hand, r to replay the last hand, or e to end game: n
<call to playHand>

Enter n to deal a new hand, r to replay the last hand, or e to end game: x
Invalid command.
Enter n to deal a new hand, r to replay the last hand, or e to end game: e
```

Hopefully this hint makes the problem seem a bit more approachable.

#### **Entering Your Code**

Be sure to only paste your definition for playGame in the following box. Do not include any other function definitions.

#### A Cool Trick about 'print'

A cool trick about <code>print</code>: you can make two or more print statements print to the same line! Try out the following code. It will separate the first and second line with a space, and the second and third line with a "?" rather than putting each on a new line.

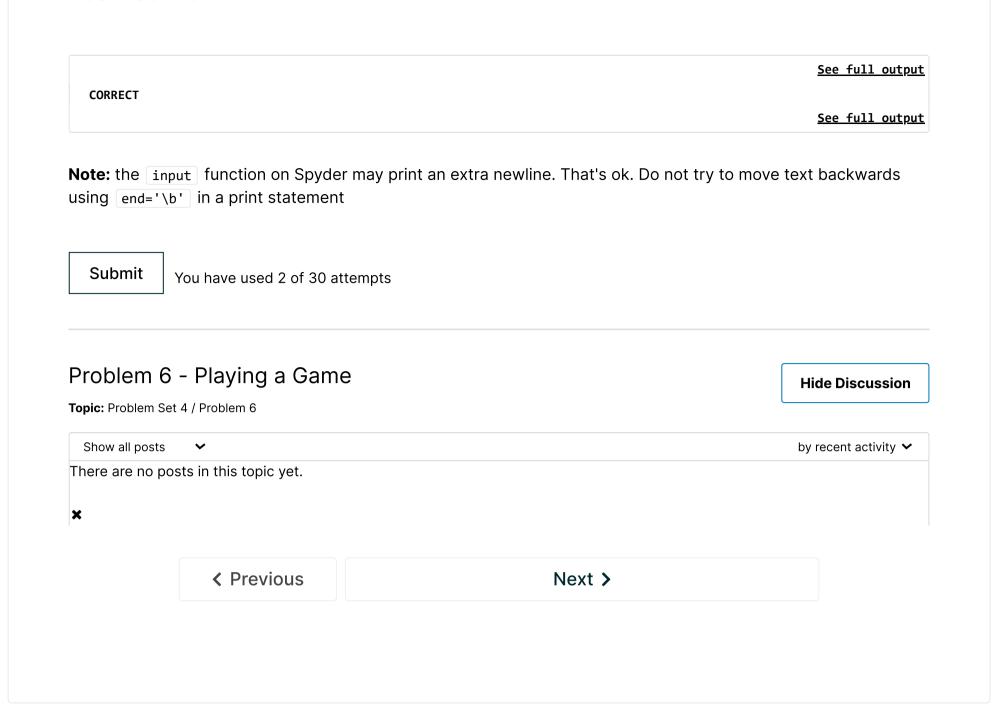
```
print('Hello', end = " ")
print('world', end="?")
print('!')
```

```
1 # A game consists of playing multiple hands. We need to implement one final
2 # function to complete our word-game program. Write the code that implements the
3 # playGame function. You should remove the code that is currently uncommented in
4 # the playGame body. Read through the specification and make sure you understand
5 # what this function accomplishes. For the game, you should use the HAND_SIZE
6 # constant to determine the number of cards in a hand.
7
8 # Testing: Try out this implementation as if you were playing the game. Try out
9 # different values for HAND_SIZE with your program, and be sure that you can
10 # play the wordgame with different hand sizes by modifying only the variable
11 # HAND_SIZE.
12
13 def playGame(wordList):
14 """
15 Allow the user to play an arbitrary number of hands.
```

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



## Test results



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