

Week 4: Good Programming

<u>Course</u> > <u>Practices</u>

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Problem 6 - Playing a Game

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0.0/15.0 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...

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```
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 <code>playHand</code> - be sure that your code is modular and uses function calls to the <code>playHand</code> helper function!

You should also make calls to the dealHand 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

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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 print: 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 def playGame(wordList):
    2
    3
                               Allow the user to play an arbitrary number of hands.
     4
    5
                                 1) Asks the user to input 'n' or 'r' or 'e'.
    6
                                          * If the user inputs 'n', let the user play a new (random) hand.
    7
                                          * If the user inputs 'r', let the user play the last hand again.
    8
                                          * If the user inputs 'e', exit the game.
    9
                                          * If the user inputs anything else, tell them their input was invented to the state of the state
10
11
                                 2) When done playing the hand, repeat from step 1
12
13
                                 # TO DO ... <-- Remove this comment when you code this function
14
```

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

Unanswered

Note: the <u>input</u> function on Spyder may print an extra newline. That's ok. Do not try to move text backwards using <u>end='\b'</u> in a print statement

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You have used 0 of 30 attempts

Problem 6 - Playing a Game

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15 lines of code It was really easy then the last one.	1
keep getting this error in the grader but this doesnt happen in the IDE Function call: playGame(<edx internal="" wordlist="">) Test 5: Nothing should break if I call 'r' first</edx>	5
? invalid syntax : comma after "e" show up as invalid syntax, why? File "submission.py", line 17 if userEnter=="	2
 done successfully, but still feel could have done better 1) I have done the program successfully but used 17 lines of code to do that. Just wondering i 	4
19 lines of code: 01 hr The secret is to write a pseudocode on paper before starting to write the code. previous time	3
how to replay the last hand? Lused if elif else, and the a recursive call to playGame to continue playing the game until '	7
Hallelujah Finally Solved, ~15 hours To all the first-time-programmers out there, This was really difficult for me, not because of th	3
ifname == 'main': how does this make the program runs? Where is thename variable assigned and why is it equal to 'main'?	2
There was a problem running your solution (Staff debug: L379). Hi, I received the following two message in the report without any other information. I even r	3
What's the meaning of the all capital letter string variables/constants at the beginning? The all caps variables at the beginning of the ps4a.py code appear to mean something. The a	5

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what does this function(end="") do?	3
'HAND SIZE', not a static const	ed in to 'dealHand' function. Be sure you pass in ant. 3 ID SIZE' not properly passed in to 'dealHand' function. Be
? Should playHand function retu	rn updated dictionary? that returns dictionary, the grader marked it as a correct
? different output so when i run my program in spyder	this is my output: `Loading word list from file 83667 w
? use of global variables? ! have difficulties telling program the	3 at i have already played one hand, since all the variables i
"Current Hand: " text before di For Problem 5 you can straight up ju	splayHand 5 ust call `displayHand` and it will be considered correct, w
unchanged.	updated, but back in playGame(), hand dict keeps 9 e(). hand dictionary is originated by calling dealHand(HA
? Why the playGame function be Hello! I've already done the problem	gins after running the code? 6, but I've got a doubt and I'd like to resolve it. Along the
hand seems to be reversed! Somewhere in coding, Python rever	ses the letters in the hand. The grader complains as follo
? Can't get HAND SIZE Right for My code works in my IDE but I can't	Grader get HAND SIZE to work for the grader! I keep getting the
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