Slicing Strings

- 1. Given a string, display every other character beginning with the first. For instance, given the string "alphabet", your program would display "apae".
- 2. Use slicing to determine if a given string is a palindrome (reads the same forward and back). How does this compare to the palindrome program you wrote earlier?
- 3. Given a string, create a new string consisting of the first two characters followed by the last two characters. For instance, the string "computer" would become "coer". If the string has fewer than four characters, display an alternate message.
- 4. Given a "sentence" of "words", separated by spaces, write a program that swaps the first and last letters of each word. For example, the sentence "Python is fun" will be changed to "nythoP si nuf".
- 5. *Scrambler*: Write a function that takes a string as an argument and returns a new string in which all of the letters of the word are in random order. Hint: try building a new string by removing a character from a random position one-at-a-time.
- 6. *Word Twister*: A game is played in which the user is presented with a sequence of letters that, when rearranged, will spell a word. The player selects any two different positions and the letters in those positions are switched. This continues until the player has rearranged the letters into the proper word. Use your function from the question above to implement this game.