

1. Define a function `generate_n_chars()` that takes an integer `n` and a character `c` and returns a string, `n` characters long, consisting only of `c`:s. For example, `generate_n_chars(5,"x")` should return the string `"xxxxx"`. (Python is unusual in that you can actually write an expression `5 * "x"` that will evaluate to `"xxxxx"`. For the sake of the exercise you should ignore that the problem can be solved in this manner.)
2. The function `max()` from exercise 1) and the function `max_of_three()` from exercise 2) will only work for two and three numbers, respectively. But suppose we have a much larger number of numbers, or suppose we cannot tell in advance how many they are? Write a function `max_in_list()` that takes a *list* of numbers and returns the largest one.
3. Write a function `find_longest_word()` that takes a list of words and returns the length of the longest one.
4. Write a function `filter_long_words()` that takes a list of words and an integer `n` and returns the list of words that are longer than `n`.
5. A *pangram* is a sentence that contains all the letters of the English alphabet at least once, for example: *The quick brown fox jumps over the lazy dog*. Your task here is to write a function to check a sentence to see if it is a pangram or not.
6. "99 Bottles of Beer" is a traditional song in the United States and Canada. It is popular to sing on long trips, as it has a very repetitive format which is easy to memorize, and can take a long time to sing. The song's simple lyrics are as follows:

99 bottles of beer on the wall, 99 bottles of beer.
Take one down, pass it around, 98 bottles of beer on the wall.

The same verse is repeated, each time with one fewer bottle. The song is completed when the singer or singers reach zero.

Your task here is write a Python program capable of generating all the verses of the song.

7. Write a function `char_freq()` that takes a string and builds a frequency listing of the characters contained in it. Represent the frequency listing as a Python dictionary. Try it with something like `char_freq("abbabcbdbabdbbabababcbcbab")`.