Week 1 Super Challenges

Week 1 - Challenge A

Create a program that takes any sentence as an input and returns the largest word in the sentence. If there are two or more words that are the same length, return the first word from the string with that length. Your program must ignore punctuation.

Example:

Please input your sentence:

A man, his brother, and his dog went to Vancouver.

Output:

Longest word: Vancouver.

Week 1 - Challenge B

Create a program that accepts two separate lists of numbers as input and returns **true** if the first list can be "nested" inside the second.

List1 can be "nested" inside List2 if:

- List1's min is greater than List2's min.
- AND List1's max is less than List2's max.

Example:

Enter List1:

1 2 3 4

Enter List2:

0 6

Output: True

Other Example data sets

List1=[1, 2, 3, 4] list2=[0, 6] → true
([3, 1], [4, 0]) → true
([9, 9, 8], [8, 9]) → false
([1, 2, 3, 4], [2, 3]) → false

Week 1 – Challenge C

Phone button letter combos:

Given a string of numbers that only contain the digits 2-9 and is a maximum of 4 digits return all possible letter combinations that the number could represent.

A mapping of digit to letters (just like on the telephone buttons) is given below. Note that 1 does not map to any letters.

Example:

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Input: "23"

Output: ["ad", "ae", "af", "bd", "be", "bf", "cd", "ce", "cf"].
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