Ejercicios básicos 7

Ejercicio 1
Hi, here's your problem today. This problem was recently asked by Twitter:

Given an array of integers of size n, where all elements are between 1 and n inclusive, find all of the elements of [1, n] that do not appear in the array. Some numbers may appear more than once.

Example:
Input: [4,5,2,6,8,2,1,5]
Output: [3,7]

Ejercicio 2
Hi, here's your problem today. This problem was recently asked by Amazon:

You are given an array of integers. Return the length of the longest consecutive elements sequence in the array.

For example, the input array [100, 4, 200, 1, 3, 2] has the longest consecutive sequence 1, 2, 3, 4, and thus, you should return its length, 4.

Ejercicio 3
Hi, here's your problem today. This problem was recently asked by Uber:

Given a number of integers, combine them so it would create the largest number.

Example:
Input: [17, 7, 2, 45, 72]
Output: 77245217

Ejercicio 4

Hi, here's your problem today. This problem was recently asked by Twitter:

Given an array of characters with repeats, compress it in place. The length after compression should be less than or equal to the original array.

Example:

Input: ['a', 'a', 'b', 'c', 'c', 'c']
Output: ['a', '2', 'b', 'c', '3']

Ejercicio 5.1
Escribir una función que reciba como argumento unstring y un numero (n), y devuelva **otro** string que será el string original shifteado n veces.
void string_reverse (char *);

Ejercicio 5.2
Hi, here's your problem today. This problem was recently asked by Apple:

You are given two strings, A and B. Return whether A can be shifted some number of times to get B.

Eg. A = abcde, B = cdeab should return true because A can be shifted 3 times to the right to get B. A = abc and B= acb should return false.

```
def is_shifted(a, b):
  # Fill this in.

print is_shifted('abcde', 'cdeab')
# True
```