1. [20] Consider the following puzzle:

“Ten cells numbered 0,1,…,9 inscribe a 10-digit number such that each cell, say i, indicates the total

number of occurrences of the digit i in this number. Find this number.”

For your information: the answer is 6210001000. Indeed, cell 0 is filled with 6 and there are 6 zeros in

this number, etc.

Formulate this problem as a CSP.

2. [40] Implement a backtrack search algorithm in C++, to find the solution for the CSP of Question 1.