Laboratory practice No. 2: Exhaustive search o Brute force

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3) Practice for final project defense presentation

3.1 for resolve this problem we used a HashMap, the HashMap has keys, the keys are vertex and the vertex can be identified with a code, the HashMap values are List of pairs, pairs has the vertex arrival and arc's size. The algorithm visit all vertex without repetitions and plus all arcs size that it visited until arrived again to the origin. Finally all correct solutions are save in a list, then the list is sorted and the algorithm shows the min hamilton path.

3.2 O(n! * n)

3.3 yes, the algorithm can be used for this number of people because it is fast with this numbers

3.4 for solve this problem we used a matrix to create the map, the map has boxes in good or bad conditions, bad conditions boxes are represented with ' * ' in the input and with a -1 in the matrix, good conditions boxes are represented with ' . ' in the input and with 0 in the matrix. Finally, we used an array, in the array the ubication is the colum and the number that it contains is the file; so, the algorithm works putting the queens in all possibles combinations (except in bad conditions boxes) then it asks if they attack each other or no.

3.5 T(n) = n*T(n-1)
O(n) = n!

3.6 n: queens number

4) Practice for midterms

4.1

4.11 *actual > máximo*

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4.12 *O(n) = n^2*
4.2
4.2.1 arr, k + 1
4.2.4 O(n!)
4.3
4.3.1 *return i-m*
4.3.2 *return n*
4.3.3 *O(n)*
4.4
4.1
4.4.2 *(I N - M I) * log 10 M*
4.5
4.5.1 *i + 1*
4.5.2 *left == rigth*

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