ESTRUCTURA DE DATOS 2
Código ST0247

Laboratory practice No. 2: Brute Force

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3) Practice for final project defense presentation

3.1. We first need to generate all the posible paths and then we use an array in which we store all the total weight of a path (considering it actually exists), also compare the paths stored and the most efficient path to a certain point is the path that we Will use.
3.2. $O(V^2)$ because if we have 2 vertex then we Will have 2 edges, if we have 4 vertex, we will have 12 edges and we need to calculate all the edges with all the vertex.
3.3. That is something like 50* 49*48*47*…*1; and it would take way too long using brute forcé.

3.4. We used an ArrayList of pairs (in order to store the coordinates where a queen can't be positioned) in which the values are row and columns that can't be used.

3.5 $T(n) = (C1 + C2) + n^n + n^2 = O(n^n)$ in the worst cases The first one uses backtracking and compares every queen with the other Queensm the second one is an static array .

3.6 n is the number of the position of the queem, i is the number of Queens that are in a position of the board .

4) Practice for midterms

4.1.1 **if(actual>máximo)**
4.1.2 **In the worst of the cases $n^2/2 + n/2 = O(n^2)$**
4.3.1 **Line 12= i-j;**
4.3.2 **Line 13= n**
4.3.3 O(nm)
4.4.1 **temp%10**
4.4.2 b. $O(|N-M|). Log_{10}M$
4.5.1 i+1
4.5.2 right==left

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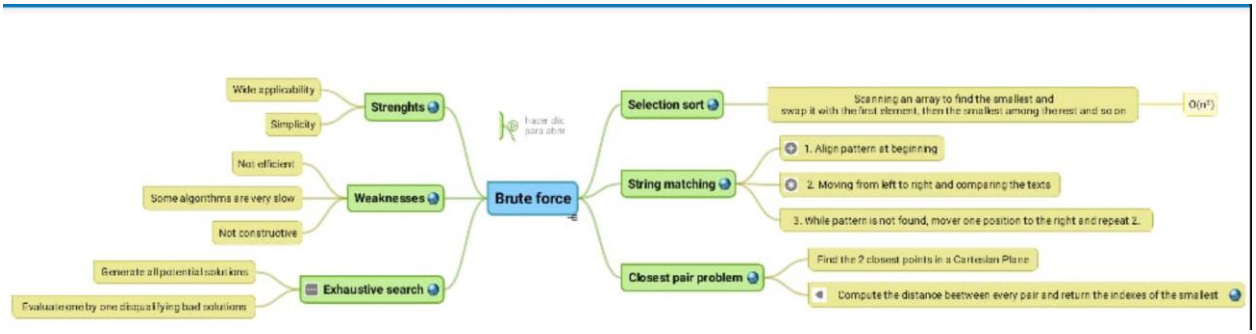
5) Recommended reading (optional)



6) Team work and gradual progress

6.1

Integrante	Fecha	Hecho	Haciendo	Por hacer
Santiago Gil	19/02/19	Punto 2	Documentación	Punto 3
Felipe Ríos	19/02/19	Punto 1	Documentación	Punto 4
Santiago Gil	23/02/19	Punto 3	Cálculo de complejidad	Revisión
Felipe Ríos	23/02/20	Punto 4	Informe	Revisión

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