

Laboratory practice No. 2: Brute force

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3) Practice for final project defense presentation

3.1 The coding to know in a detailed and efficient way the vertices of a graph consists of an algorithm that by means of a brute force evaluates all the possible paths to traverse the graph itself and in turn to know the efficiency of the same to then evaluate path by path the simplest and shortest path. In addition, a stop condition is proposed, which refers to a path where the last vertex through which this path passes is known as the stop vertex.

3.2 The complexity is $O(V \cdot E)$

3.3 It depends of the quantity of clients, for example if a client is connected to another one, the time execution will be 2,5 seconds

3.4 We solve this problem using 2 types of data structures. To represent the board we used a matrix with n rows and n columns; and for the array, indexes symbolizes the columns and values symbolizes the rows of the board.

The algorithm works by iterating recursively the columns after verifying if a queen can be change their position

3.5 The complexity is $O(n^2)$

3.6 n is the number of columns and rows of the matrix

4) Practice for midterms

4.1 4.1.1) if (actual > maximo)

4.1.2) $O(n^2)$

4.3 4.3.1) ordenar(arr, $k+1$)

4.3.2) $O(n^2)$

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ESTRUCTURA DE DATOS 2
Código ST0247

- 4.4 4.4.1)** return i-j
- 4.4.2)** return n
- 4.4.3)** $O(n)$
- 4.5 4.5.1)** int j= i + 1
- 4.5.2)** left ==right