

Laboratory practice No. 3: Backtracking

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3) Practice for final project defense presentation

3.1 Dijkstra, Greedy and others.

3.3 The difference between BFS and DFS is the order in which the graph has been recorded, for some problems that have no relevance that the two algorithms have achieved, but in other cases this choice is crucial.

3.4 Dijkstra, Voracious Algorithms.

3.5 DFS, This looks for all the ways to find the shortest path

3.6 $O(n)$

3.7 n , is the maximum between the number of vertices and the number of arcs.

3.8 Test all possible combinations to determine the correct position where the queen will be located, backtracking was used.

4) Practice for midterms

1.

1.1) (n, a) ;

1.2) (a, b) ;

1.3) (a, c)

2.

2.1) 0

2.2) $(v, \text{path}[], \text{graph}[], \text{pos})$;

2.3) $(\text{graph}[], \text{path}[], v)$;

3.

a) [0,4,2,6,1,5,3,7]

b) [0,3,7,4,2,6,1,5]

4.

5.

5.1) $\text{lcs}(i, j, s1, s2)$;

5.2) n_i, n_j

5.3) $O(n)$

6.

6.1) c

6.2) c

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		<p>Data Structures 1</p>

6) Team work and gradual progress (optional)

Juan Pablo Giraldo 2.1 - 4
Juan Felipe Londoño 1.1 - Template

Communication: WhatsApp, Codeshare.io, OneDrive.



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