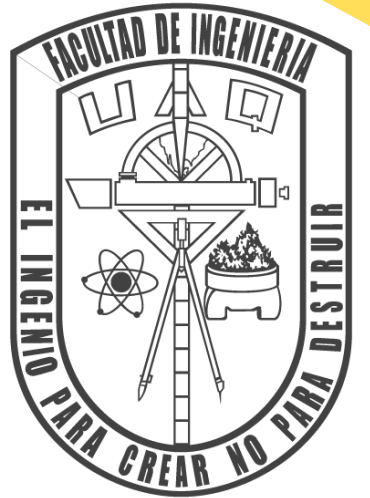




# ALGORITHMS LABYRINTH

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## INTRODUCTION

An algorithm can be defined as a sequence of instructions that represents a solution model to determine the type of problem. Or, as a set of instructions they perform in order, they lead to the solution of a problem.

Characteristics:

Precise

Definite

Finite

Can have zero

or more input elements

It must produce a result.

A search algorithm is one that is designed to locate an element with certain properties within a data structure; for example, place the record corresponding to a certain person in a database, or the best move in a game of chess.

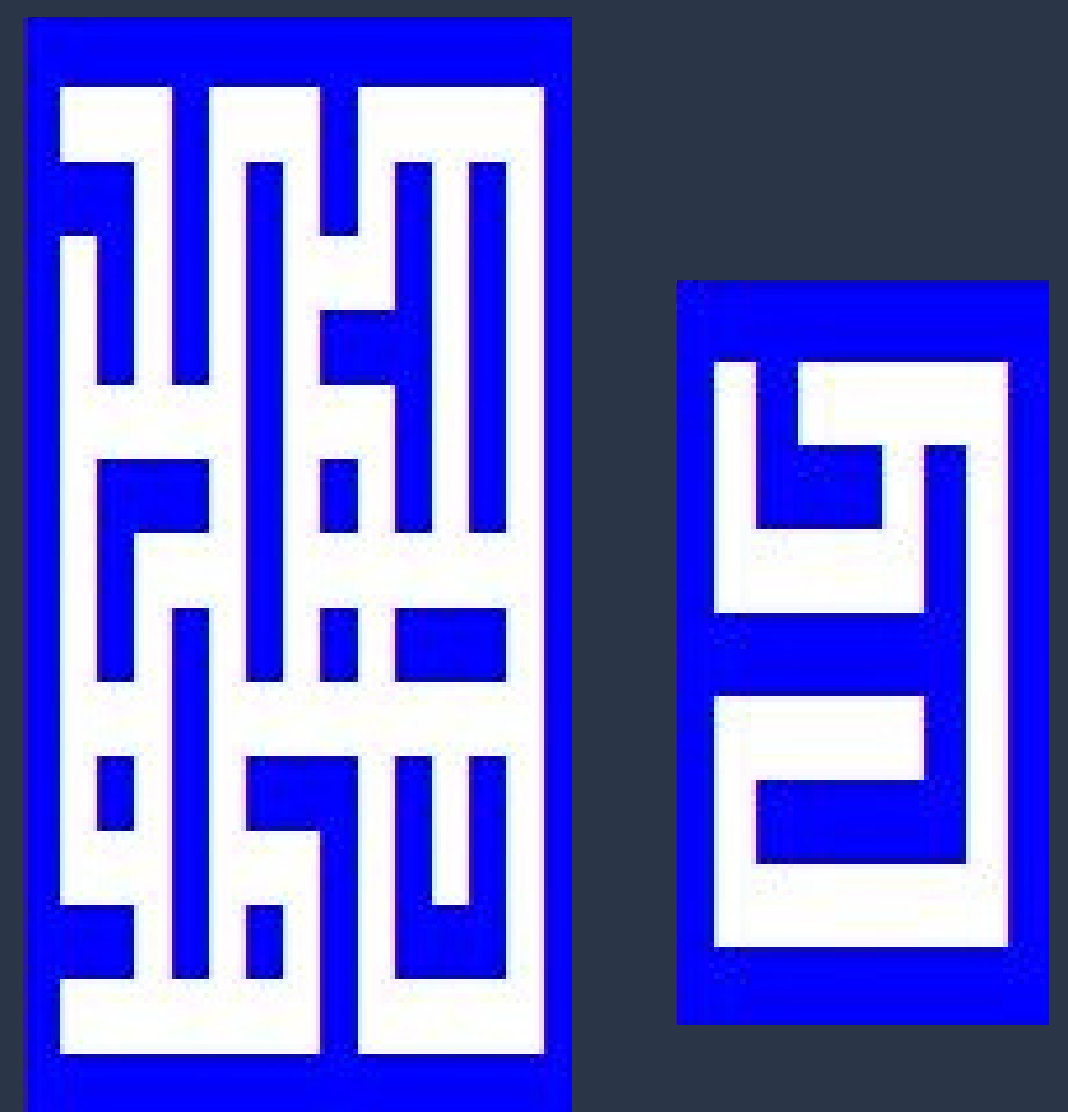
## METHODOLOGY

A Depth First Search (DFS) is an algorithm that allows all the nodes of a graph or tree (graph theory) to be traversed in an orderly, but not uniform way. Its operation consists in expanding each and every one of the nodes that it locates, in a recurring way, in a concrete path. When there are no more nodes left to visit on that path, he returns, so he repeats the same process with each of the brothers of the node already processed.

As for the labyrinth the nodes will be the cells that mark the path, and will have to be assigned as a wall or hall.

## RESULTS & DISCUSSION

The programming language used was Python since it has many resources that facilitated the realization of the code. The code has the characteristic that randomly generates the path and can be of 'n' columns and 'n' lines.



## REFERENCES

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