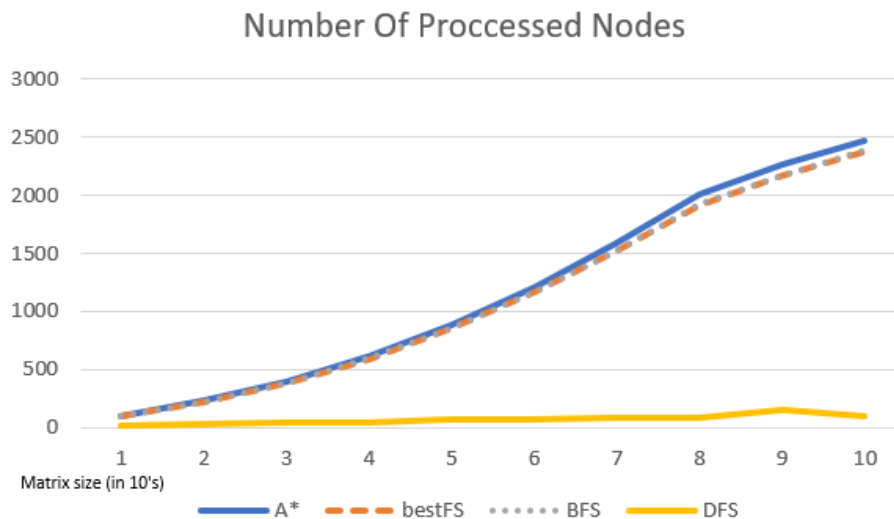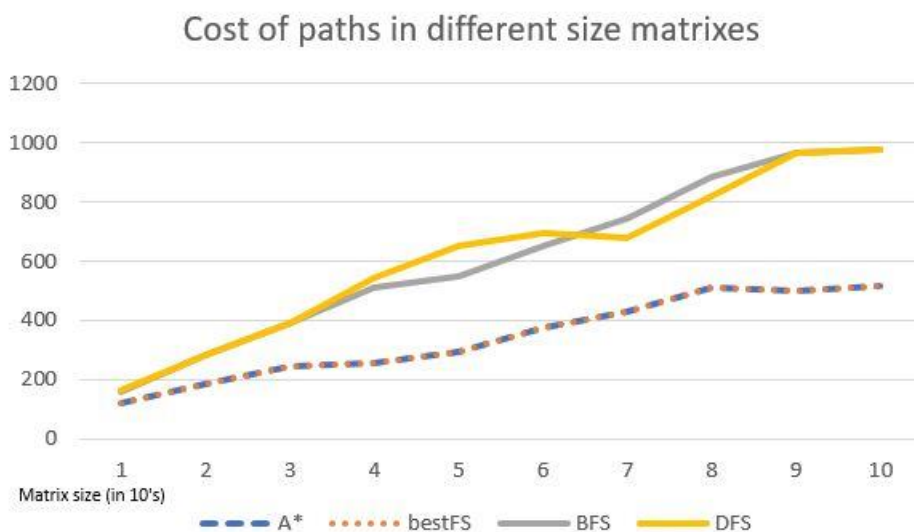# Algorithms Analysis

In our experiment we compared the results from 4 different algorithms for solving a "best path" problem in a matrix. The following graphs present the results:

1. The number of nodes that were processed in every algorithm:

Number Of Proccessed Nodes

2. The cost of the path in each algorithm:

Cost of paths in different size matrixes

Conclusion:

- DFS algorithm processed a considerably lower number of nodes. However, the path it produced has the highest cost.
- A* and BestFS both produced the same minimal cost path, with a slight difference in the number of nodes they processed. However, A* algorithm uses a distance heuristic function, that can vary in different implementations or inputs. For that reason, we believe that A* will produce the best result in average.