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Your report needs to explain at least the following:

Which heuristics did you use for the A* algorithm?

Our heuristic was based on the amount of containers that we out of their place, and for the inconsistency we used a random number for each node, this could be result as a good or bad thing.

Test your program with a couple of different problems. Increase the size of the problem to test the limits of your program. Make a table comparing how many nodes are searched to find the answer for each problem. For this table, you should compare a number of different problems (at least 3) to avoid statistical bias. Which of the three algorithms searches the least nodes and which one take the most?.

Max height	Initial State	Goal State	A* consistent	A* inconsistent	UCS visited
3	();(A,C);(B)	(B);(A);(C)	8	66	16
4	(A,B);(C,D);()	(A,B,C);(X);(X)	10	6	17
7	(A,C,D);(T,Y);()	(C);(D,A);(X)	3422	13161	9049

Why does this happen?

UCS is an optimal algorithm, however, the problem with this algorithm is that checks all the possible paths to find the solutions which takes a considerable time in computing a solution. Although, when you give the algorithm a heuristic it helps the algorithm to make decisions leaving apart the part of doing the whole computations.

Which algorithms are optimal? Why?

UCS will always do all the comparisons to find the optimal path to the solution, besides the time is an optimal algorithm, but for that problem the heuristic is implemented however if the heuristic is bad the algorithm could be affected.

In your opinion, what are the benefits of simpler algorithms versus more complex ones?

Simpler algorithms are great and ease to compute and program , and I consider that are good to solve simple problems, because if we decide to use complex algorithms to solve simple problems the time computing the solution are not worth, because using simple algorithms would find good solutions faster.

Simpler Algorithms are easier to implement and also sometimes require less information to do their job also the computing power to run them is less than with the other algorithms