AI Planning for Autonomy

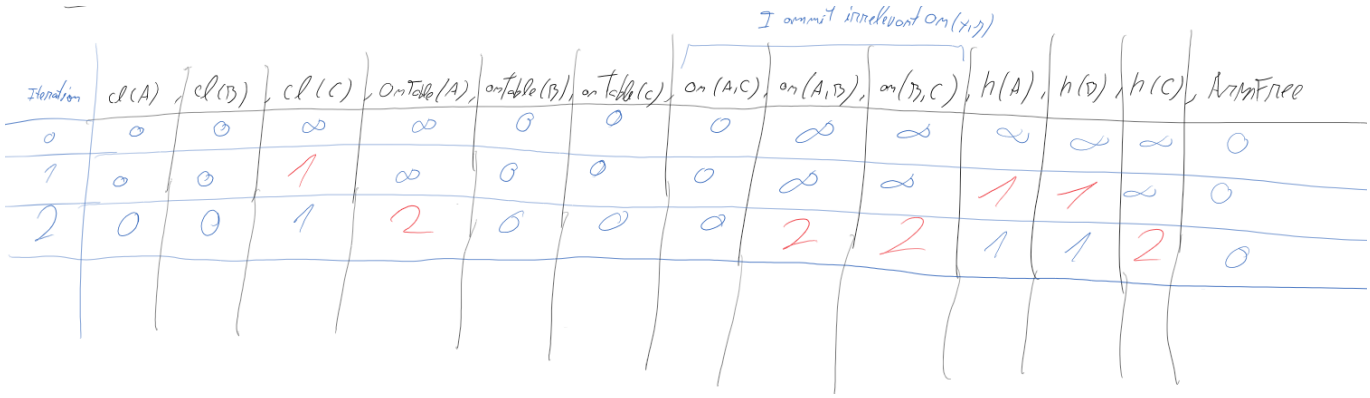
Solution Problem Set V: Delete Relaxation

1.

- If computed with respect to each food it's roughly a Minimum Spanning Tree (techincally a Steiner Tree, since paths can branch in non-food location, i.e. the Steiner Points)
- Shortest path to eat the hardest m food points
- Equivalent, look at slides
- $h_{max} << h^+ << h^*$, $h_{max} << h^+ << h_{add}$. $<<$ stands for dominance. h^* dominates admissible heuristics, that's why it doesn't dominate h_{add}.

2.

- Compute $h^{add}(s_0)$ for this blocks-world problem. $h^{add}(s_0) = 5$. For computation, see below.
- Compute $h^{max}(s_0)$ for this blocks-world problem. $h^{max}(s_0) = 2$. For computation, see below.



The table for h_{add} changes only the value for $on(B, C)$ to 3, hence h value of the Goal is 5.