

0. Initialize by setting OPEN equal to a set containing only the start node and setting CLOSED, SOLUTION, SOLUTION_COSTS, SOLUTION_GOALS, and LABEL each equal to the empty set.
1. Find the set of nodes in OPEN, call it ND, that have at least one node selection function value that is not dominated by:
 - 1.1. the cost of any solution path already discovered (i.e., in SOLUTION_COSTS), nor by
 - 1.2. the node selection function values of any other potential solution represented by a node on OPEN.
2. Terminate or select a node for expansion.
 - 2.1. If ND is empty, do the following:
 - 2.1.1. Use the set of preferred solution path costs in SOLUTION_COSTS and the LABEL sets. If any, to trace through backpointers from the goal nodes in SOLUTION_GOALS to s.
 - 2.1.2. Place any solution paths in SOLUTION.
 - 2.1.3. Stop.
 - 2.2. Otherwise, do the following:
 - 2.2.1. Use a domain-specific heuristic to choose a node n from ND for expansion, taking goals, if any, first.
 - 2.2.2. Remove n from OPEN.
 - 2.2.3. Place n on CLOSED.
3. Do bookkeeping to maintain accrued costs and node selection function values.
4. Identify solutions.
 - 4.1. If n is a goal node, do the following:
 - 4.1.1. Add it to SOLUTION_GOALS,
 - 4.1.2. Add its current costs to SOLUTION_COSTS.
 - 4.1.3. Remove any dominated members of SOLUTION_COSTS.
 - 4.1.4. Go to Step (6).
 - 4.2. Otherwise, continue.