

(a) State is represented as a successive list of items that have been added to the knapsack.

(b) Successor function would include adding each possible item to the knapsack & then checking to see if the weight is less than the max weight. If it is less than, the algorithm continues to expand that arm of the tree.

(c) Optimization goal includes maximum value for minimum weight.

(d) Maximization problem; maximize value while not exceeding weight.