

To sort 4 elements, we need  $4! = 24$  leaf nodes. Since the tree is binary, each node can only have 2 child nodes, which means each non-leaf node expands the number of leaf nodes by 1. Starting from the root, we will need at least 23 expansions to make 24 leaf nodes, therefore the decision tree will have 23 non-leaf nodes which represents 23 if statements.