Key Concepts:
- Mini-Max Algorithm
- Alpha-Beta Pruning

General Understanding Questions
1. Explain how the minimax algorithm works to arrive at a “solution”
2. The minimax algorithm is most closely related to which of the traditional uninformed search algorithms? Explain your answer.
3. What requirements/assumptions are necessary for the mini-max search to work properly?
4. What requirements must be met for the endgame evaluation function for mini-max search?
5. What does the term "ply" mean in mini-max search?
6. Explain how alpha-beta pruning works?
7. What are the "assumptions" made by the search algorithm that lets alpha-beta pruning work?

Demonstration Questions
1. Consider the game tree shown below, in which a static evaluation function has been applied to the leaf nodes. What value will the minimax algorithm assign to the each of the non-leaf nodes? [Similar to what we did in class at the start of Session 2.4]
2. Consider the game tree shown below. If the minimax algorithm was implementing alpha-beta pruning it could avoid considering several nodes in the tree (Both internal and leaf nodes). List the nodes that can be skipped if we use alpha-beta pruning. [Similar to what we did in class at the start of Session 2.5]

Combo Question
- [Combines GA6 with Demo2] In a previous problem you listed the nodes that alpha-beta pruning could skip. Explain how alpha-beta pruning works and why the nodes you listed are guaranteed not to be part of the "solution."