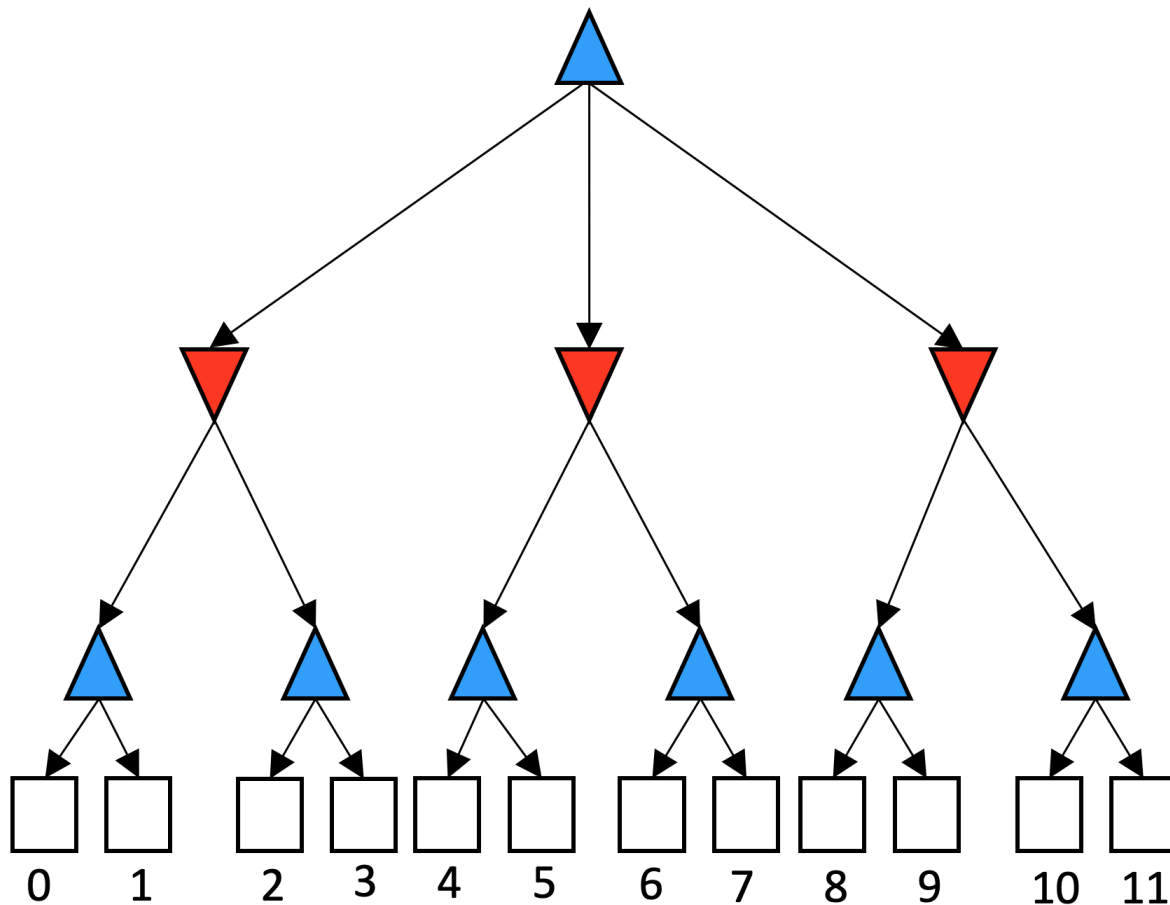


Intro to Dear AI - Fall 2021
Homework 2
Alpha-beta search
Due: Friday, October 15th, 11:59 pm

Description

In this homework, you will work on the same alpha-beta search problem that we have solved in the class. The slide also had a [youtube link](#) for you to watch the complete solution for the example search tree. The tree structure is fixed and is shown in the figure below. You need to write a program that receives 12 numbers separated by space from the user. The 12 input numbers will correspond to the 12 terminal nodes of the tree from left to right. Your program should print the index of the terminal states that will be pruned using the alpha-beta search algorithm. The indexes are fixed and are shown in the figure below (0 to 11). As an example case, if the fourth blue triangle from the left should be pruned, your program must print: "6 7" referring to the two terminal nodes below that node.



Submitting Instructions and Grading

Follow the same procedure for accessing the homework on Moodle server as described on [Homework 1](#). Look for “Alpha Beta Search” homework. The grading policy will be also similar (i.e., 10 test cases, and 10 points for each correct answer). The grade you see on Moodle will be a proposed grade. Your submission can be manually checked.

Similarity Check

Please note that Moodle automatically checks for similarities between any submissions at any time that is related to this homework. The Collaboration and Cheating policy is presented in our [syllabus](#).

Questions?

Post them on [Piazza](#).

Example input-output pairs

Example 1

Input:

2 4 13 11 1 3 3 7 3 3 2 2

Output:

3 6 7 10 11

Example 2

Input:

1 4 2 6 8 7 3 7 2 3 2 2

Output:

10 11

Example 3

Input:

15 4 12 16 10 7 3 1 2 3 2 2

Output:

6 7 10 11

Example 4

Input:

1 4 12 16 1 7 3 1 2 8 2 2

Output:

3

Example 5

Input:

1 4 12 16 1 7 3 1 2 8 10 2

Output:

3 11