

*PLEASE SUBMIT YOUR WORK ON E-Mail (Also keep a copy on sent items for just in case).*

**Due Date: Apr 3**

The assignment is individual, so please do not make any information exchange or do not discuss about the answers or ask anybody for help except the instructor. You can use any Internet resources for reading, you can search for the answers on any search engine (like Google) or you can use any textbooks.

For all the parts below, please write your code in Lisp Programming Language and test with Dr. Racket.

**Assumptions**

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Assume you have given a map with following information: List of Edges and List of Nodes

You are asked to find a solution for the map coloring problem on the given map. The problem can be defined as, use minimum number of colors possible to color all the nodes and the constraint is, you can not color to adjacent (neighbor) nodes into same color.

**Questions**

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1) Implement a game tree for tic-tac-toe game.

**Testing**

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For the given board setup below

```
(define myBoard (list (list 1 1 -1)
                      (list -1 -1 -1)
                      (list -1 0 1)
                      ))
```

Use the check winner function implemented in class for scoring the leaf nodes.

```
(define (checkWinner aBoard)(winnerFromList (checkWinStates aBoard)))
```

Use your function to decide the best move for the given board setup. You can return a play coordinate like 1, 2, -1 where 1 is the X coordinate, 2 is the Y coordinate and -1 is the move of the player. You can also define your own standards for artificial intelligence decisions.

You can also download the programming practices for tree coding from the web page of course.