Minimax Algorithm

Aim: To implement Minimax Algorithm problem using python.

Source Code:

```
from math import inf as infinity
from random import choice
import platform
import time
from os import system
HUMAN = -1
COMP = +1
board = [ [0,0,0],
          [0,0,0],
          [0,0,0],]
def evaluate(state):
    if wins(state, COMP):
        score += 1
    elif wins(state, HUMAN):
        score = -1
    else
        score = 0
    return score
def wins(state, player):
    win_state = [
[state[0][0], state[0][1], state[0][2]],
```

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if [player, player, player] in win_state:
    return TRUE
else:
    return FALSE

def game_over(state):
    return wins(state.HUMAN) or wins
                (state.COMP)
def empty-cells(state):
    cells = [ ]
for x, row in enumerate(state):
    for y, cell in enumerate(row):
        if cell = 0:
            cell.append([x, y])
    return cells

def valid_move(x, y):
    if [x, y] in empty_cells(board):
        return TRUE
    else:
        return FALSE

def render (state, c_choice, h_choice):
    chars = {
        -1 : h_choice
        +1 : c_choice
        0 : ' '
    }
    str_line = '---'
    print ("\n" + str_line)
    for row in state:
        for cell in row:
```

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        symbol = chars[cell]
        print(f' | {symbol} |', end=" ")
    print("\n" + str_line)
def ai_turn(c_choice, h_choice):
    depth = len(empty_cells(board))
    if depth == 0 or game_over(board):
        return

    clean()
```