School Nova CS 101

Homework 5-1-2022

Start with the classwork code.

Task 1

Extend the classwork code by replacing the human player with another AI player (assume that the second AI player always plays Rock).

The AI player that gets the most points after ALL rounds is the winner. Add code to find the winner and display this information. Note, you can use np.sum(:, x) to find the sum of values in column x.

Task 2

Create five different AI strategies. Each strategy should be a function (recall how to create user-defined functions).

Some simple examples:
1) Always play Rock.
2) Randomly choose Rock, Paper, or Scissors.
3) Randomly choose either Rock or Paper, but never Scissors.
4) Choose a strategy that beats the opponent's strategy from the previous round. For the first round, choose a random strategy.
5) Use your imagination!

Task 3*

Create a round-robin tournament of your strategies. Note: you will need to save the result of each AI vs. AI match.