## **PRINT** your Name:

circle your section

- 2 Tues 11:20
- 3 Thur 12:50
- 4 Tues 5:30
- 1. Consider the following variation of the game of Nim:

The game begins with the four digits 1,2,3,4 in a line:

 $1 \quad 2 \quad 3 \quad 4$ 

Players take turns crossing out either one or two **adjacent** digits. (For example, on your first move, you could cross out 3&4 but not 1&4.) The winner is the player who crosses out the last digit.

Draw a partial game tree that shows that the player who goes first always has a winning strategy, no matter what the other player does.

2. Circle which date you prefer for the second midterm.

April 14 April 21 No

No preference