**Homework Assignment**

1. Consider the dynamic game shown below.
2. Represent the game in normal-form (i.e. matrix form).
3. Find all the pure strategy Nash equilibria.
4. What are the sub-games of this game?
5. Find all subgame perfect Nash equilibria.
6. Use backward-induction and show that the result is equivalent to SPNE.



1. Consider the dynamic game below known as “the centipede game”.
2. Find all the pure strategy Nash equilibria.
3. Use backward induction to find all the SPNE.



1. Find all the mixed strategy Nash equilibria for the game below:

