

## ECO4010 Tutorial 11

1. Can weakly dominated strategies be played in a trembling hand perfect equilibrium? Why or why not?
2. A strategy profile  $\sigma$  is trembling hand perfect if there exists a sequence of strategy profiles  $\sigma^n \rightarrow \sigma$  for all  $i$  and  $s_i \in S_i$  such that  $\sigma_i(s_i) > 0$  implies that  $s_i$  is a best response to  $\sigma^n_{-i}$ . Prove that every trembling hand perfect profile is a Nash equilibrium.
3. For the following game, find the pure strategy NEs. Show whether or not they are trembling-hand perfect.

		Player 2	
		$L_2$	$R_2$
Player 1:	$L_1$	1, 6	0, 5
	$R_1$	1, 1	1, 2

4. Find NE and ESS in the following game.

	$a$	$b$	$c$
$a$	2, 2	0, 0	0, 0
$b$	0, 0	0, 0	1, 1
$c$	0, 0	1, 1	0, 0