**Homework 2**

1. Derive two competing platforms’ optimal prices when users are single-homing. Interpret the results.

2. Read the attached article about review website TripAdvisor and address the following questions:

a) Why is there a concern regarding the biased or fake review on TripAdvisor? What are your suggestions to address it (for the platform and for the hotels)?

b) How would you measure the impact of online reviews on reservations? What is the potential problems?

c) Will those actions by hotels to encourage guests to write reviews affect the informativeness of the online reviews?

d) Comment on Four Seasons Hotels’ and Homewood Suites’ strategies of managing the online reviews.

3. Prove the following claim: In the standard second-price auction, it is a weakly dominant strategy for bidder i to bid exactly his true value vi (Truth-telling).

4. If a platform is using generalized second price auction to sell advertising slots. There are two slots and three advertisers. The first slot receives 200 clicks while the second receives 100. Advertiser 1, 2, and 3 have value per click of $10, 4 and 2, respectively. Could you find an equilibrium and prove it?