PSet10 Report

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I made a class `System` which consists of `Player` objects. The players play in the system and their utilities get updated.

1 Section 1

The plot for Q over time is drawn in Fig 1 for various values of beta.

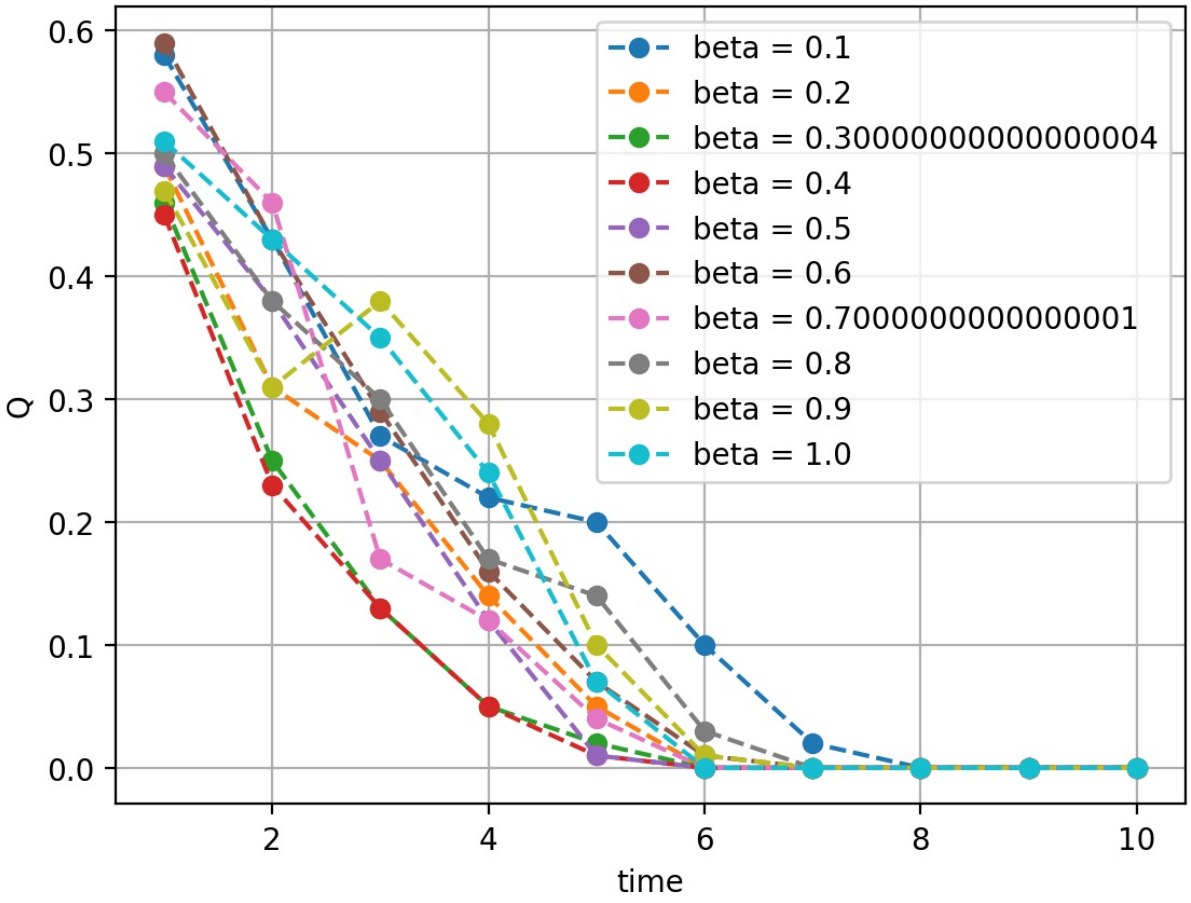

Figure 1: As we can see, the equilibrium of the system is 0

2 Section 2

Changing the equilibrium can be easily achieved by taking the transpose of the utility matrix. The results are in Fig 2.

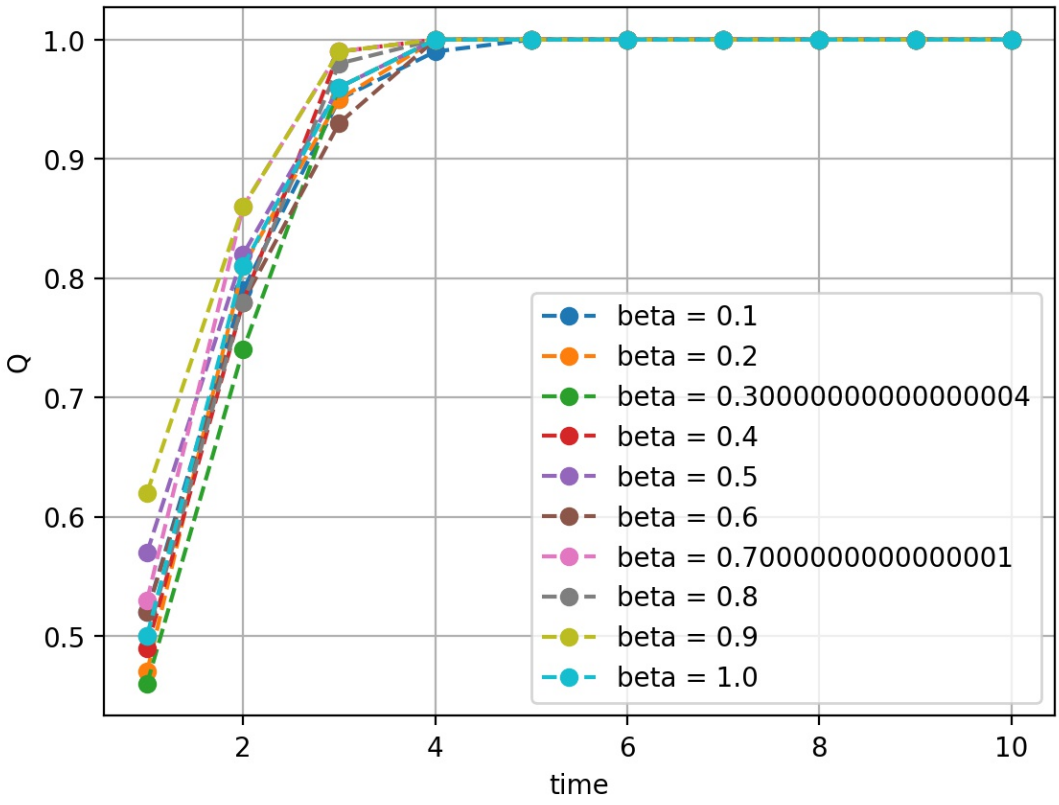

Figure 2: The plot for Q over time for various β, with the utility matrix transposed.

3 Section 3

Now we add the probability that a player revolts. The results for the previous sections are regenerated, taking this probability into account. Fig 3

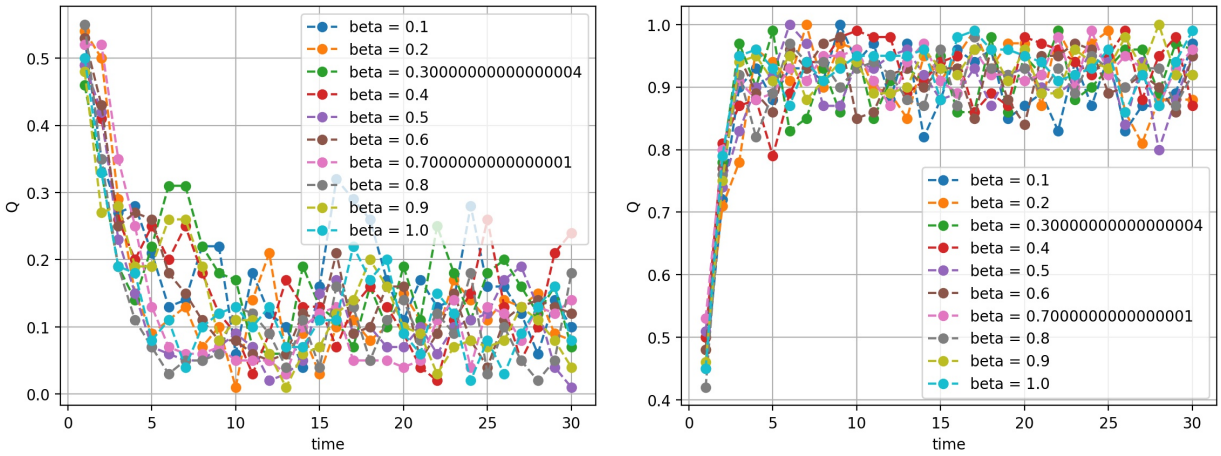

Figure 3: Again the equilibrium is on 0 and 1 but there are fluctuations due to the revolting of the players.