Game Theory: Assignment part I

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As You already know: there is an assignment which may be conducted with 2 people. If You choose to do the assignment for my part (i.e. non-cooperative game theory), You can choose one of the following.

1. Provide in Your own words a self-contained presentation of the Braess' Paradox.

2. A short essay in which one describes oneself a problem and set up and solve a game theoretic model.

3. Consider an arbitrary Nim game.

   a. How do we know from game theory that this game has a value?

   b. Explain how one can determine the value and why this is so.

   c. Consider the game $(5, 7, 6, 4, 1, 3, 9)$, i.e. there is a pillow with 5 matches, one with 7, ..., and one with 9. What is the value of this game?

In order to answer these questions, You probably have to consult some literature.

Please hand in before March 17 by a file in PDF-format to `pierre.vanmouche@wur.nl`. Typically Your work should have a size of $\pm$ 3 pages.