Exercises

Ex.1
Consider the Glove game \((N,v)\) such that \(N=L \cup R\), where \(N\) and \(L\) are two finite sets such that \(L \cap R= \emptyset\), and 
\[v(S)=10 \min\{|L \cap S|, |R \cap S|\}\] for all \(S \in 2^N \setminus \emptyset\). Verify that the glove game is super-additive.

Ex.2
Find a ten-players TU-game with empty imputation set. Is it super-additive?

Ex.3
Find the core of the TU-game \((\{1,2,3\},v)\) such that \(v(1)=v(2)=1, v(3)=4, v(1,2)=v(1,3)=6, v(2,3)=8, v(1,2,3)=10\).