Problem 1 Prove that the following language is coNP-complete.

\[ L_{\text{coNP}} = \{ \phi: \text{a Boolean formula that is satisfied by every assignment} \}. \]

Problem 2 Given a set \( S = \{a_1, a_2, ..., a_n\} \) and value \( T \), we want to know that is there a subset \( S' \subseteq S \) such that \( \sum_{a_i \in S'} a_i = T \). Prove that this problem is NP-complete.