Problem 3.1  [Set Splitting]. Prove that the following problem is NP-complete.

**Set Splitting:** Given a finite set $S$ and a collection $C$ of subsets of $S$, is there a partition of $S$ into disjoint sets $S_1$ and $S_2$ such that no set in $C$ is a subset of $S_1$ or $S_2$?

**Hint:** The reduction is straightforward if you choose the right problem to reduce from.