1. **Making Change.** Consider the following non-standard coin denominations:

\[ 1\epsilon, 4\epsilon, 7\epsilon, 12\epsilon \]

Suppose we are making change for 33\epsilon.

(a) What set of coins will the greedy algorithm output?

(b) Is this optimal? If not, what is the optimal way to make change for 33\epsilon using this set of coins?

2. **When is greedy good?** What does it mean for a problem to have the optimal substructure property?