1. Suppose $x_1, x_2, \ldots, x_n$ are real numbers. Propose a greedy algorithm to find the minimum number of closed unit intervals whose union contains all the points. Explain how the algorithm addresses the optimal substructure and greedy properties.

2. Suppose $A = \{a_1, a_2, \ldots, a_n\}$ and $B = \{b_1, b_2, \ldots, b_n\}$ are two sets of positive integers. Let $\pi$ denote a permutation of $\{1, 2, \ldots, n\}$. For a given permutation $\pi$, let

$$V_{\pi} = \prod_{i=1}^{n} a_{\pi(i)} b_{\pi(i)}.$$

Propose a greedy algorithm that will maximize $V_{\pi}$ over all possible permutations $\pi$. Explain how the algorithm addresses the optimal substructure and greedy properties.