CSE 450/551 Mid-Term Soln

Prob 1.

For solution to this problem, please refer to class slides on Stable Matching and also the chapter on Stable Matching in the recommended text book for the CSE 450/551 class titled Algorithms by Kleinberg and Tardos.

Problem 2: With choice of an arbitrary element β_K from the sequence S, the set S is partitioned into three parts $S_1, S_2,$ and S_3. If the elements (numbers) in the set are distinct $|S_2| = 1$ and $|S_1| + |S_3| = n-1$ where $|S| = n$.

The partitioning of S_1 and S_3 may be even or uneven. Even implying both S_1 and S_3 has about $n/2$ elements. Uneven implying that S_1 has $n-1$ elements and S_3 has zero elements, or S_3 has $n-1$ elements and S_1 has zero elements.