Assignment 1

Exercise 1: 10 Points
Let $S_1, S_2, \ldots, S_q$ be a collection of sets, each represented as an unordered collection of elements, and let $N = \sum_{i=1}^{q} |S_i|$. Show how to compute the union and intersection of $S_1, S_2, \ldots, S_q$ in $O(sort(N))$ I/Os.

Exercise 2: 10 Points
Why does the stack not use a buffer of size $B$? (Exercise 2.1 from the book)