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Intersection Operation Pseudo Code

Go through each value of set 2. n

For each value see if it is in Set 1. n

If the value is in set 1 check to see if it is already in intersection set. n

If not then insert in intersection set.

while( S2.next !=NULL){

while(S1.next != NULL){

if(S1.value=key){

while(new\_set !=NULL){

if(S1.value=new\_set.value){return;}

else insert

Worst case the operation would have to run all the way through set 2. Which has n nodes. It will take 1 operation to reassign the temporary pointer referencing the next node. Which is n operations. For each of those values in set 2 it will check if it is in set 1. Worst case it would have to run through set 1 completely every time which would be n operations to move through the set and one operation for each one comparing it to the value we are searching for. With each of these values we will check the intersection set to see if it is already in there with the worst case being going through the entire set, n. and insert which could be possible n operations.

n+n^2+n

Worst Case: O(n^2)