

## CS 2420

## Final Programming

## Final Programming:

This final was probably one of the best I've taken because the content was so applicable to future usage. I also appreciate how all the tests we have aren't just reviewing what we've learned, but reviewing it and then applying it to something new that we haven't, but that we can figure out if we know the previously learned content. It definitely was a bit of a curve to learn how the set methods would work, but the overriding the previous add, insert, and append methods was pretty easy by just putting an if statement that says if it's already in the set, then don't do it.

	Union AB	Union AC	Union BC	Inters ection AB	Inters ection AC	Inters ection BC	Differe nceAB	Differe nceAC	Differe nceBC	Differe nceBA	Differe nceCA	Differe nceCB
Sizes	2946	935	2379	368	368	368	567	567	2011	2011	0	0

The way I solved this was by creating temporary sets so that I could then pop the items in them and compare them to the original sets and decide to add them or not to the new set.

## Testing:

Thanks for helping me find that little  $n^2$  or more loop! I was able to test my difference on a small group and find it worked correctly. I learned a lot doing this final. Would this be faster if we did a binary search tree?

```
C:\Shell1317
File Edit Shell Debug Options Window Help
Enter "help" below or click "help" above for more information.
>>>
===== RESTART: C:\Users\aedin\Downloads\LinkedListSetTester.py =====
Set A size: 935
Set B size: 2379
Set C size: 368
UnionAB Squeezed test (45 lines)
UnionAC Squeezed test (73 lines)
UnionBC Squeezed test (124 lines)
IntersectAB [under, Table, 2001:, Young, Small, Emacs, Stark, Moral, Brief, Fight, Hack,, their, line., After, would, shall, later, words, Every, comes, price, bring, spent, facts, going, fight, Twain, never, every, trust, hours, book,, state, ther
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local, you,, index, moved, picks, too?, third, adds,, will,, Maybe, stars, wane,, Since, turns]
IntersectAC [under, Table, 2001:, Young, Small, Emacs, Stark, Moral, Brief, Fight, Hack,, their, line., After, would, shall, later, words, Every, comes, price, bring, spent, facts, going, fight, Twain, never, every, trust, hours, book,, state, ther
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IntersectBC [under, Table, 2001:, Young, Small, Emacs, Stark, Moral, Brief, Fight, Hack,, their, line., After, would, shall, later, words, Every, comes, price, bring, spent, facts, going, fight, Twain, never, every, trust, hours, book,, state, ther
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DifferenceAB Squeezed test (51 lines)
DifferenceAC Squeezed test (53 lines)
DifferenceBC Squeezed test (249 lines)
DifferenceBA Squeezed test (249 lines)
DifferenceCA []
DifferenceCB []
UnionAB Size: 2946
UnionAC Size: 935
UnionBC Size: 2379
IntersectAB Size: 368
IntersectAC Size: 368
IntersectBC Size: 368
DifferenceAB Size: 567
DifferenceAC Size: 567
DifferenceBC Size: 2011
DifferenceBA Size: 2011
DifferenceCA Size: 0
DifferenceCB Size: 0
>>>
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