**CSE 212 – Programming with Data Structures**

**W05 Prove – Response Document**

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| **Date:** | Oct. 2022 |
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**Question 1: From Part 1, how did you answer the interview question for the Set Operations problem (should be no more than 30 seconds if spoken aloud)?**

To make the intersection, I think the easiest and most obvious answer is to loop check each item in the first list against every item in the second list using FOR loop nested in a FOR loop, and place any items which are the same in an array. To combine or unify two lists together, I would create an array, and then using two FOR loops append each item from both arrays to the new array one-by-one.

**Question 2: From Part 2, how did you answer the interview question for the Find Pairs problem (should be no more than 30 seconds if spoken aloud)?**

To solve this problem, I would first create an empty stack. Then I would take every item in the list of words, invert it, and then search for a match in the stack. If a match is found, the word and its inverted version will be placed in a list called pair, which will then be placed in 2-dimensional array called pairs; the inverted word will then be removed from the stack. If a match is not found in the stack, then the word will be placed in the stack.

Remember: You need to submit the following code files in addition to this document:

* 05-prove\_set\_operations.py
* 05-prove\_find\_pairs.py