**Searching and Sorting Lists \*\* Save all your programs \*\***

1. Use one of the four functions we have written (linear\_list, user\_list, get\_int or random\_list) to help you solve each task.
   1. Read n positive integers from the user (using the sentinel -1) and store these numbers in a list. Determine the number of 3s that were entered and output the result.
   2. Modify get\_int() to read n letters from the user (using the sentinel “Done”) and store these letters in a list. Determine the number of vowels that were entered. Output the result.
   3. Create two random lists each containing n elements and determine if one list is a reversal of the other. Output the result.
   4. Modify get\_int() to read n prices from the user (using the sentinel -1) and store these prices in a list. Determine the second most expensive item and output the result.

2. Write a function common(a, b) that takes two lists, a and b and returns the a list that contains the common elements between them. For example, the common elements of [1, 2, 4, 2, 2] and [7, 2, 4, 2, 5] is [2, 2, 4].

3. We learned today about two built in functions called .sort() and sorted to help us sort lists. Pretend for this question that neither of those functions exist!!!!

A simple sorting algorithm is called Selection Sort, which finds the smallest value in a list, and swaps it with the first element. It then locates the next smallest value, and swaps it with the second element, and so forth. Write a program that implements Selection Sort on a list with n elements.