1. Write a program that first reads in the name of an input file, followed by two strings representing the lower and upper bounds of a search range. The file should be read using the file.readlines() method. The input file contains a list of alphabetical, ten-letter strings, each on a separate line. Your program should output all strings from the list that are within that range (inclusive of the bounds).

```
input1.txt
ammoniated
millennium
```

and the contents of input1.txt are:

```
aspiration
classified
federation
graduation
millennium
philosophy
quadratics
transcript
wilderness
zoologists
```

the output is:

```
aspiration
classified
federation
graduation
millennium
```

2. Write a program that first reads in the name of an input file and then reads the file using the csv.reader() method. The file contains a list of words separated by commas. Your program should output the words and their frequencies (the number of times each word appears in the

file) without any duplicates.

Ex: If the input is:

```
input1.csv
```

and the contents of input1.csv are:

```
hello,cat,man,hey,dog,boy,Hello,man,cat,woman,dog,Cat,hey,boy
```

the output is:

```
hello 1
cat 2
man 2
hey 2
dog 2
boy 2
Hello 1
woman 1
Cat 1
```

Note: There is a newline at the end of the output, and **input1.csv** is available to download.

3. Write a program that first reads in the name of an input file and reads in the contents of the input file. The input file contains an unsorted list of number of seasons followed by the corresponding TV show. Your program puts the contents of the input file in order by the number of

seasons (lowest to highest) and TV show title in the outputFile.txt

Ex: If the input is:

```
file1.txt
```

and the contents of file1.txt are:

```
20
Gunsmoke
30
The Simpsons
10
Will & Grace
14
Dallas
20
Law & Order
12
Murder, She Wrote
```

The file output_titles.txt should contain:

```
10
Will & Grace
12
Murder, She Wrote
14
Dallas
20
Gunsmoke
20
Law & Order
30
The Simpsons
```

4. Using an external file, read in the shopping list, and display the multi-dimensional list to the user.

   Name the Python File: Chapter8GroceryList.py

   Example: Input GroceryList.txt

   Output: [['Apples', '10'], ['Oranges', '8'], ['Butter', '1'], ['Sugar', '2'], ['Bread', '3'], ['Milk', '0']]

5. Create a function which receives the user name, validates, and returns the name in proper case. Create a program that tests the function and displays the name.
6. Create a function which asks the user to enter their student id (any combination of number and letters), validates and returns the id. Create a program which executes the function and displays the student id.
7. Create a program which asks the user to enter 2 numbers between 1 and 100, validates the user's data, adds the 2 numbers together, and

displays the total value. The program should have at least 2 functions besides main and welcome.