**Major Assignment: Grocery Machine**

Find the file “groceries.txt” (in data files folder) and copy it to your working folder.

Create a program that reads in the file “groceries.txt”. Put the ID into one array, the item name into another array, and the price into a third array. Ask the user to enter an ID number. Have the machine print the item name and the price. Loop until the user enters nothing. At that point, print the subtotal, the tax (13%) and the total. Thank the user for shopping.

Accept three special codes as input:

**S (search item)**

When the user enters the letter S, have the program search for an item by name or ID. Display the ID, name and price.

**A (add item)**

When the user enters the letter A, have the program add a new item. Ask for the name and price. Generate the next ID available. Append it to the data file.

**D (delete item)**

When the user enters the letter D, have the program delete an item. Ask for the name or ID. Search for the item and display its full information (ID, name, price). Ask for verification (“Are you sure you want to delete?”). Delete the item from the data file.

Note:

There are Python functions available that allow us to search, sort and delete elements from an array. If you go online (Stack Exchange for example) you will find such useful functions. However, for this assignment I do not want you to use these specialized functions. Rather, I want you to figure out how to do the task explicitly. For example, to delete an item I want you to write over the original file with all the original elements except for the one you wish to delete, then re-read the file into a fresh array.