Lists Program Sets

1. Counter: Write a program that will take in integers from a user and store them in a list. The program should ask the user for an integer value and print the number of times that value appears in the list.
2. Basic Stats: Write a program that will take in integers from a user, store them in a list, print the sum of all the values, and print the mean, median, and mode of the values.
3. Print Evens: Write a program that will take in integers from a user, store them in a list, and print out all of the even values from the list.
4. Magic 8 Ball:

Write a program that gives a random response to any question. You will need a list of responses, input, print, and modules random and time/sleep (like we used in the control statements lab) so it looks like program is thinking

HINT: import random and use random.randInt(0, len(*yourlist*)) to pick a random spot in the list.

1. Story Generator:

Write a program that gives a different story each time it is run. Create lists for at least names, places, adjectives and verbs to create a story that is generated using random values from the list.

1. Limerick Generator:

Write a program that gives different versions of a Limerick each time it is run. Some more about limericks at <http://www.poetry4kids.com/lessons/how-to-write-a-limerick/>

1. Food List:

Write a program that asks user to enter a food item repeatedly until they type the word ‘exit’. It then prints the list sorted alphabetically and without any duplicates.

1. Breakfast menu:

Use the following list in your code.

Breakfast = [ 'toast', 'eggs', 'oatmeal', 'cereal' ]  
Print the food choices as a nicely formatted menu, with one food item per line with a random price between $1 and $10

(Hint: Use a for loop to print menu. Use the random module to get the prices Make it look nice if you want an extra challenge. Yes- you can change the list to different foods ! )

**(Optional challenge)**  Ask the user for a food to replace in the above Breakfast list, and what to replace it by, and then change it and print the new list

1. Student Names:

Given a list of student names ( use from our class or make up the names) as a list , exampleStudents = [ ‘john’, ‘susan’  ]

Use for loop and

1)Print list of names one per line.

2) Find the number of students  name begins with ‘a’ and print the total

3) find the % of students name begins with ‘a'

4) find average length of name

    10. High Scores:

Write a program that takes a list of high scores separated by, as input, and then prints the lowest score, and the highest score.

**(Optional Challenge)** print the average of the numbers.

HINT: Use the following to take information and split it based on the ,

userInput = input(‘Enter high scores’)

scoresList = userinput.split(‘,’)