

COP 2930 - Introduction to Computing Strings - Suggested Exercises

Objective:

1. Practice writing programs that use lists.

1) Write a program that asks the user to enter some names. First the program should ask the user how many names they will enter. Then, the program should ask the user to enter each name, uppercase letters only. Sort the list of names and output the sorted list.

2) Write a function that takes in a list of integers and returns True if the list is in sorted order from smallest to largest, and false otherwise. Test your function by writing a main function and creating two test arrays in your main function and then calling the `isSorted` function from main on both arrays to see what the function returns. (Exactly one of your two test arrays should be sorted.) Here is the function definition header:

```
def isSorted(mylist) :
```

3) Write a function that takes in a list of integers, *ratings*, guaranteed to be in between 0 and 10, inclusive, representing the ratings of a TV show. Your function should create a new list called *freq*, of size 11, so that *freq*[*i*] equals the number of values in the list *ratings* which equal *i*. For example, if *ratings* was [5, 6, 6, 5, 5, 9, 3, 4, 2, 2, 2, 5, 5, 5], then your function should return the list [0, 0, 3, 1, 1, 6, 2, 0, 0, 1, 0], since the ratings has three 2s, one 3, one 4, six 5s, two 6s, and one 9. Here is the function definition header:

```
def calcFreqArray(ratings) :
```