

## CS 12 - Lab 5 Strings

In this lab you will be using strings. Be sure to include all necessary information at the top of the program and use good commenting and style throughout your program.

You will write a program that can keep track of a list of strings. You should use a two-dimensional array for this. You should be able to hold 5 strings which can be either words or sentences. You may assume that the maximum length of a string will be one line of typing (80 characters).

Prompt the user to enter 5 strings and store them in the list. Print out each string nicely formatted specifying which position it is in, the string, and the length of the string. For example,

```
0:                hello world  11
1:                hear ye hear ye  15
2:      hi ho hi ho its off to work we go  33
3:                today is a wonderful day  24
4:                goodbye      7
```

Your program should then prompt the user to enter a character. You should go through each string in the list and print out any words that begin with the specified character. For example, given the character 'h', the above strings would print the following list.

```
hello
hear
hear
hi
ho
hi
ho
```

Lastly, prompt the user for a string, *str*. You will then be copying portions of this string into each string in the list. You will copy the first character into the first string, copy the first two characters into the second string, and so on. Print the list of strings and their lengths again after this. Be sure you can handle strings of any size. For example,

Enter a string: a bb

```
0:                a      1
1:                a      2
2:                a b    3
3:                a bb   4
4:                a bb   4
```

You should use the string functions whenever possible in order to receive full credit.