CPS 171 MP4 Mailing Labels

Introduction

The main purpose of this assignment is to teach the use of functions. In this assignment you ***must*** create and use a void function, a value returning function, and a void function that returns multiple values in parameters. This assignment will also teach you how to use a built-in function.

Your assignment is to write a program to print mailing labels. The program lets you enter an address. The program lets you print:

- the address without any additional formatting
- the address in package label format (surrounded by a box)

A sample run, showing the forms of printing (**1** - for printing the address without formatting, **2** - for printing the package label format, **3** - for both), is at the end of this document. You may choose other appropriate characters for the box characters. You should do a final run using the data provided.

Details

An address (for this assignment) consists of exactly three lines of text. Blank lines are not allowed. Use the **length()** function to check for empty lines. A line may contain whitespace characters (e.g. a space), as it would in a normal address. The package label must be 60 characters wide including the vertical bars.

Output

You need to turn in both a listing of your source code and the results of a run using the supplied data file.

The final run should use the data supplied in the file
http://www.hal9k.com/cps171/mp4labels_txt.htm

Cut-and-paste this file to the same directory as your program.

Hints and Suggestions

In this implementation, the functions have the responsibilities described below. Suggested calling sequences for some of the functions are given, to show how you might meet the assignment requirements. The calling sequences for the other functions are left for you to define.

GetPrintSelection( ) – this function has no calling parameters. It reads the input file for a choice of printing and returns the choice as an integer value. If the choice is invalid, it returns -1.

GetAddress( ) – this is a void function that reads the three address lines and returns them in three string parameters. If the program encounters blank lines in the file, it should continue reading until it gets three valid lines for the address.

PrintPackageLine( ) – this is a void function that prints a line of text with a vertical bar followed by a space at the front, and a space followed by a vertical bar at the end. It pads the text to the chosen limit if it is shorter than the limit.

PrintAddress( ) – prints out all three lines of an address with no formatting.

PrintPackageAddress( ) – prints out all three lines of an address with package formatting.

Sample Input for Label Program – note that blank lines could occur anywhere

```
3
John Smith
123 Main Street
Anywhere, MI. 99999-0000

2
Brian Fitzpatrick

9876 South Industrial Street
Somewhere, CA. 99111-0001
```

Sample Output from Label Program

```
Student: (your name goes here)
```

ALWAYS echo input data!

```


Echoing the address:
1: John Smith
2: 123 Main Street
3: Anywhere, MI. 99999-0000

Your print selection is: 3
```

print the address without formatting

```
Address
Line 1: John Smith
Line 2: 123 Main Street
Line 3: Anywhere, MI. 99999-0000
```

print package label format

```
************************************************************
| John Smith                                               |
| 123 Main Street                                          |
| Anywhere, MI. 99999-0000                                 |
************************************************************


Echoing the address:
1: Brian Fitzpatrick
2: 9876 South Industrial Street
3: Somewhere, CA. 99111-0001

Your print selection is: 2
```

print package label format

```
************************************************************
| Brian Fitzpatrick                                        |
| 9876 South Industrial Street                             |
| Somewhere, CA. 99111-0001                                |
************************************************************

Thank you for using the label printing program
```