

Assignment #13

Reading and Writing Files / Exceptions

Write definitions for each of the following Python functions, and for each function, include a clear and concise comment to describe its purpose.

To test these functions, create some example files, in the same directory as the Python program.

1. `Head(count, filename)`

Output, to the screen, the first 'count' lines of file 'filename', where 'count' is a non-negative integer; if the file contains fewer than this many lines, then output the entire file; if the file cannot be read, issue a suitable error message and return directly from the function (see the Linux command 'head' by typing 'man head' in a terminal window)

```
Head( 4, "So-Long-Marianne" ) ⇒  
So Long, Marianne : Leonard Cohen
```

```
Come over to the window, my little darling,  
I'd like to try to read your palm.
```

2. `SearchFile(filename, items)`

Output, to the screen, each line in file 'filename' which contains any of the strings in the list 'items', preceded by its line number; if the file cannot be read, issue a suitable error message and return directly from the function

(see the Linux command 'grep' by typing 'man grep' in a terminal window)

```
SearchFile( "So-Long-Marianne", [ "palm", "to", "To" ] ) ⇒  
3 - Come over to the window, my little darling,  
4 - I'd like to try to read your palm.  
5 - I used to think I was some kind of Gypsy boy,  
10 - To laugh and cry,
```

3. `JoinFiles(inputfilenames, outputfilename)`

Copy all files in the list 'inputfilenames' to the file 'outputfilename'; if any of the input files cannot be read, issue a suitable error message and skip that file

(see the Linux command 'cat' by typing 'man cat' in a terminal window)

```
JoinFiles( [ "in1", "in2", "in3" ], "out" ) ⇒  
( this produces no output on the screen, but it creates a file 'out',  
  containing the contents of files 'in1', 'in2', 'in3', in that order )
```

Program Submission:

Store the function definitions in a file named 'a13.py', and turn it in for grading by typing:

```
submit-cs1117 a13.py
```

Due Date: Fri Jan 22, 10:30am