

The following programming exercise makes use of the things we covered in this week's material. This is a practice programming assignment and is not submitted for grading. However, you can ask questions on this exercise just as you would with a graded exercise. Please use this week's discussion board for questions (or send me email if the questions are specific to you and your application). Enjoy!

Program: lines.py - Display requested lines in a file.

Write a program that allows the user to load a file and, repeatedly, display a line of their choice. The program should:

1. Prompt the user for the name of the file to read/load.
2. The program should read each line of the file into a list (e.g. each element in the list is a string containing the text of a line in the file)
3. The program should loop indefinitely and
 - a. Display the number of lines in the file
 - b. Prompt the user for the line number they would like to see
 - c. If the line number is 0, exit the program
 - d. If the line number is non-zero, display the appropriate line of text
 - e. If the line number is greater than the number of lines in the file, print an error and continue, asking for another number.
4. Steps 1 & 2 above should be part of a function that prompts the user for the input file, opens it, reads the file contents into a list and returns the list.
5. Step 3 should be included in a main() function.

Create and run this program as a Python script called **lines.py** and test it with a text file of your choice.