CS 111 Lab #7

In this lab, we will build a program that will encrypt a text file using a technique known as "Caesar cipher." From Wikipedia:

> ***[Caesar cipher] is a type of substitution cipher in which each letter in the plaintext is replaced by a letter some fixed number of positions down the alphabet. For example, with a shift of 3, A would be replaced by D, B would become E, and so on. The method is named after Julius Caesar, who used it to communicate with his generals.***

Program Structure

Given the basic outline in the previous section, develop a program that implements a Caesar cipher. Your application should begin by prompting the user for a text file to encrypt, the desired offset, and an output file. Using the functions described in detail below, encrypt each line of the file using the provided offset and write it to the output file specified by the user.

Sample Output

Here is an example of the program's prompts:

```
Enter a file name to encode: input.txt
Enter an encoder offset: 3
Enter a destination file for the encoded text: output.txt
Your file has been encrypted.
```

The contents of input.txt:

```
Who is it in the press that calls on me?
I hear a tongue shriller than all the music
Cry "Caesar!" Speak, Caesar is turn'd to hear.
```

The contents of output.txt:

```
Zkr lv lw lq wkh suhvv wkdw fdoov rq ph?
L khdu d wrqjxh vkuloohu wkdq doo wkh pxvlf
Fub "Fdhvdu!" Vshdn, Fdhvdu lv wxuq'g wr khdu.
```