Lab 07 - File Streaming

Instructions:

- The lab requires completing a few tasks.
- Your submissions must be submitted to the GitHub repository in the Lab07 directory.
- Cheating of any kind is prohibited and will not be tolerated.
- Violating and failing to follow any of the rules will result in an automatic zero (0) for the lab.

TO ACKNOWLEDGE THAT YOU HAVE READ AND UNDERSTOOD THE INSTRUCTIONS ABOVE, AT THE BEGINNING OF YOUR SUBMISSION(S), ADD A COMMENT THAT CONSISTS OF YOUR NAME AND THE DATE.

Grading

Task	Maximum Points	Points Earned
1	2.5	
2	2.5	
Total	5	

A Vigenere cipher, a substitution cipher like the Caesar cipher. Each character is encrypted based on position using a key of length n.

Example:

Given the key = "HI", the message "Message" will be encrypted as

Text:	М	e	s	s	a	g	e
Value:	12	4	18	18	0	6	4
Key:	Н	Ι	Н	I	Н	I	Н
Value:	7	8	7	8	7	8	7
Encoding:	Т	М	Z	A	Н	О	L

Your objective is to create a program named 'EncryptedCopy' that includes the 'CharHash' file and performs the following:

- 1. Prompt the user to enter a string key until the key only consists of letters.
- 2. Prompt the user to enter a file.
- 3. Create an encrypted version named 'ECopy.txt' of the file using the Vigenere cipher with the provided key if the file opens. Otherwise, state the file did not open. Any character in the file that is not a letter should not be encrypted but printed.

Task 1

Write the above program in C++.

Task 2

Write the above program in Ruby.