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Shift Cipher Spec

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1 Shift Cipher Overview

Shift Cipher or Caesar cipher is a type of cryptographic cipher where the alphabet is "shifted". For example a shift of four makes the alphabet look like:

Normal: `a b c d e f g h i j k l m n o p q r s t u v w x y z`
Shifted: `e f g h i j k l m n o p q r s t u v w x y z a b c d`

Each letter in the original alphabet is matched to the new, "shifted" alphabet. Letters from the original message would be replaced with letters in the shifted alphabet. For example a message with a shift of four looks like:

Normal: `this message is a secret`
Shifted: `xlmw qiwweki mw e wigvix`

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2 Relevant Concepts

The program must prompt the user to enter both a sentence to be shifted, as well as the the number of times the alphabet should be shifted. The program should then loop through the user input and replace every letter with the new shifted letter.

`input():`
Takes user input and stores it in a variable
`ex. var = input("enter an input: ")`
`index():`
Returns the index of the given character in a list
`ex. list.index("a")`
`for loop:`
Useful for looping through strings
`ex. for i in range(0, len(str)):`

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3 Challenges

`Parse` user input to make sure that it is valid, ei. consists of only letters and spaces.
`Implement` a version of the shift cipher that also works with uppercase letters