**Caesar Cipher** (caesar.py)

A Caesar cipher is a simple substitution cipher in which each letter of the plain text is substituted with a letter found by moving n places down the alphabet. For example, assume the input plain text is the following:

abcd xyz

If the shift value, n, is 4, then the encrypted text would be the following:

efgh bcd

You are to write a function that accepts two arguments, a plain-text message and a number of letters to shift in the cipher. The function will return an encrypted string with all letters transformed and all punctuation and whitespace remaining unchanged.

**Note:** You can assume the plain text is all lowercase ASCII except for whitespace and punctuation.

>>>

>>> import string

>>> x = string.ascii\_lowercase

>>> x

'abcdefghijklmnopqrstuvwxyz'

>>> x[3:]

'defghijklmnopqrstuvwxyz'

>>> x[:3]

'abc'

Solution:

1# caesar.py

 2import string

 3

 4def caesar(plain\_text, shift\_num=1):

 5 letters = string.ascii\_lowercase

 6 mask = letters[shift\_num:] + letters[:shift\_num]

 7 trantab = str.maketrans(letters, mask)

 8 return plain\_text.translate(trantab)