Lesson 20:

1. Quiz: Shift a Letter

alphabet = dict()

for letter in range(ord('a'), ord('z')):

alphabet[chr(letter)] = chr(letter + 1)

alphabet['z'] = 'a'

def shift(letter):

return alphabet[letter]

1. Quiz: Shift n Letters

def create\_alphabet\_dictionary():

alphabet = dict()

for letter in range(ord('a'), ord('z')):

alphabet[chr(letter)] = chr(letter + 1)

alphabet['z'] = 'a'

return alphabet

def shift\_n\_letters(letter, n):

alphabet = create\_alphabet\_dictionary()

while n > 0:

letter = alphabet[letter]

n -= 1

while n < 0:

if letter == 'b':

letter = alphabet['z']

elif letter == 'a':

letter = alphabet['y']

else:

letter = alphabet[chr(ord(letter) - 2)]

n += 1

return letter

1. Quiz: Rotate

def rotate(input\_string, steps):

output\_string = ''

for letter in input\_string:

if letter == ' ':

output\_string += letter

else:

output\_string += shift\_n\_letters(letter, steps)

return output\_string