edX

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Problem 1 - Build the Shift Dictionary and Apply Shift

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0.0/20.0 points (graded)

The `Message` class contains methods that could be used to apply a cipher to a string, either to encrypt or to decrypt a message (since for Caesar codes this is the same action).

In the next two questions, you will fill in the methods of the `Message` class found in `ps6.py` according to the specifications in the docstrings. The methods in the `Message` class already filled in are:

- `__init__(self, text)`

- The getter method `get_message_text(self)`

- The getter method `get_valid_words(self)`, notice that this one returns a copy of `self.valid_words` to prevent someone from mutating the original list.

In this problem, you will fill in two methods:

1. Fill in the `build_shift_dict(self, shift)` method of the `Message` class. Be sure that your dictionary includes both lower and upper case letters, but that the shifted character for a lower case letter and its uppercase version are lower and upper case instances of the same letter. What this means is that if the original letter is "a" and its shifted value is "c", the letter "A" should shift to the letter "C".

   If you are unfamiliar with the ordering or characters of the English alphabet, we will be following the letter ordering displayed by

`string.ascii_lowercase` and `string.ascii_uppercase` :

```
>>> import string
>>> print(string.ascii_lowercase)
abcdefghijklmnopqrstuvwxyz
>>> print(string.ascii_uppercase)
ABCDEFGHIJKLMNOPQRSTUVWXYZ
```

A reminder from the introduction page - characters such as the space character, commas, periods, exclamation points, etc will *not* be encrypted by this cipher - basically, all the characters within `string.punctuation` , plus the space (`' '`) and all numerical characters (0 - 9) found in `string.digits` .

2. Fill in the `apply_shift(self, shift)` method of the `Message` class. You may find it easier to use `build_shift_dict(self, shift)` . Remember that spaces and punctuation should not be changed by the cipher.

Paste your implementation of the `Message` class in the box below.

```
1
```

Press ESC then TAB or click outside of the code editor to exit

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Problem 1 - Build the Shift Dictionary and Apply Shift

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💬	**Spoiler: Hint to Solve the Problem** The problem is really easy if you think in right direction. Think of it as a dictionary operation n...	7
?	**help with message "Message' object is not iterable"** Hi in my own editor i call apply_shift with print(Message.apply_shift("hello",0)) and I get the ri...	1
☑	**In tests, my output is the dict, not "passed", but dict changes by shift** Hello, I've finally been able to get some code making sense, but running the test, it shows the...	2
?	**Failing on apply_shift... no errors, but only a few letters are incorrect for each test case.** Not sure what I'm doing wrong, but this is what happens each time I run my code... Test: 6 ap...	1
💬	**The most efficient way to construct the shifted dictionary** Hello, this is my implementation of the method to construct the shifted dictionary. I was won...	4
?	**Can't figure out how to implement my code into class Message (object)** Hi, I am done coding the Message (object), but I have made build_shift_dict(self, shift) and ap...	3
?	**Error** File "submission.py", line 169 n = 0 ^ IndentationError: expected an indented block I dont hav...	1
?	**Not sure what this error message means?**	3
?	**struggling with implementing apply_shift** I'm encountering the problem with my code in Spyder. Getting the error NameError: name 'b...	4
?	**How can I integrate my working code into the Message class. And how can I test it without all the other functions being implemented yet.** Dear all, I have managed to built a shift dictionary and it works when I apply it to a test messa...	1
?	**build_shift_dict not defined?** Hi, So my build_shift_dict code works fine, but then when I start my apply_shift definition with...	2

💬 **TypeError: build_shift_dict() takes 2 positional arguments but 3 were given**   3

I got this type error, but I passed in 2 arguments, why does it keep saying 3 were given? wher...

? **Is this the same issue with python dict order in 3.5???**   4

My output looks ok but it failing. It is sorted in spyder, random in edx, but looks like the corre...

? **ps6 working on Anaconda but failing to grade**   7

I'm applying successfully my ps6 code in Anaconda but getting for all test cases: Traceback (...

💬 **For those struggling...it's possible. Everything gets easier after you figure out the encryption method**   1

Creating build_shift_dict was the hardest part for me. My advice to those trying it is to create ...

💬 **Question about an error I got**   6

? **My build_shift_dict works in Python, but looks random when I submit to edx?**   3

My build_shift_dict method looks right in Python, but appears completely random when I sub...

? **TypeError: object() takes no parameters**   1

Hi, I am not sure what this error means when I run my code through the online interface. Wh...

? **Inconsistencies between Spyder and grader**   5

? **Why is my Build Shift Dictionary function incorrect?**   3

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