

day27 L337\$P34K (LeetSpeak)

Due Monday 10/23/23

Your task is to write a program that converts normal text to "leetspeak", which is a sort of alternate alphabet for English that some people use online. Here is a link to a Wikipedia page discussing this type of online text:

<https://simple.wikipedia.org/wiki/Leet>

You will ask the user to enter text, then go through the text, letter by letter, and replace appropriate letters with leet replacements. Here is a sample run from my solution:

```
Welcome to the LeetSpeak (L337$P34K) translator.  
Please enter text to be translated: My pet hamster is named Steve  
MY PET HAMSTER IS NAMED STEVE  
MY P37 H4M$73R I$ N4M3D $73V3
```

The above program does the following four translations:

A	4
E	3
T	7
S	\$

Now, I'll walk you through what you need to do. First, create a new repl for Python. Then start coding:

1. Tell the user what's going to happen (using a print call).
2. Ask the user to enter something to translate. (using an input call, store what they enter in a variable "text").
3. Make text upper case. (`text = text.upper()` will do the trick).
4. Print the text variable now that it is upper case.
5. Create an empty variable called output. (just say `output = ""`)
6. Use a for loop and go through all the letters of text, one at a time. (`for x in text:`). This takes the letters from text and puts them into x one at a time.
7. Inside the for loop, do an if/elif/else statement to swap out the characters or not, as appropriate. It would be something like this:

```
for x in text:  
    if x == "A":  
        output = output + "4"  
    elif x == "E":  
        output = output + "3"  
    else:  
        output = output + x
```

Notice that the if statement structure is indented so that it's inside the for loop. Then, you have one if (the line checking if x is "A"), and one elif (the line checking if x is "E") and finally, an else, which copies over the letter x if it's not an A or an E. To add more translations you would have more elifs before the else. You will only have one if line (the first condition) and one else line (the last) and multiple elifs.

8. Add elif conditions before the else part so that your program also handles T and S (see my table above).

Test your code. If you enter "leetspeak" you should get L337\$P34K.

9. Add three more translator elifs, your choice, here are some you might choose from:

B	8
G	9
O	0
F	PH
N	
M	^/\
W	\/\
K	X

Feel free to look over the Wikipedia page to get other ideas.

Save a copy of you running the program with at least a 5 word phrase in triple quotes to show me that you tested your program and have seen all of the translations your program offers. I want to see every single elif condition from your code be actually triggered in your sample run output. Ask me to clarify if you don't understand what I am saying.

When you are done turn in the Share link on the Google Classroom. Thanks.