Practice Problems in Python

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1 Easy Problems

1.1 Strings

All the problems below should be programmed without using any built-in functions.

1. Determine the alphabet letter that appears most frequently within a given sentence.

2. Reverse an sentence read using the function *input()* without using any built-in function, such as *reversed()*

   Input: How do you reverse a string in Python?

   Output: ?nohtyP ni gnirts a esrever uoy od woH

3. Reverse every word in the sentence while maintaining the original order of words.

   Input: How do you reverse a string in Python?

   Output: woH od uoy esrever a gnirts ni nohtyP?

4. Write a program that transforms an English sentence (at least 10 words) into a quirky version where vowels are replaced with consonants. The first vowel gets swapped with the first consonant, the second vowel with the second, and so on. Note: You may use the function *enumerate()*.

   Input: the quick brown fox jumps over the lazy dog

   Output: thc qgdck brfwn ffx jgmpcd fvcr thc lbzy dfg

5. Pick any sentence you like, at least 10 words long. Imagine this sentence uses a special set of letters, like its own personal alphabet. Let's call this set the "sentence alphabet." Our goal is to rewrite the sentence using only those unique letters from the sentence alphabet, getting rid of any repeats

   Input: the quick brown fox jumped over the moon last night

   Output: the quick brown fx jmped vr mn las gh

   the quick brown fox jumped over the moon