Exercises Strings extra

Exercise 1

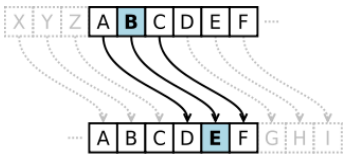
Write a program to play Wheel of Fortune. In this word game you have to guess a proverb/sentence by entering a letter each time until you think you recognize the proverb/sentence.

You may put the proverb hard coded in your program. Also the string that indicates how many words and letters the proverb consists of may be hard coded.

```
You have to guess this quote: #### ####### ##
Guess a letter or press / if you think you know the quote: e
You already have this result: #ee# ####### ##
Guess another letter: o
You already have this result: #ee# #oo#### ##
Guess another letter: k
You already have this result: kee# #ook### ##
Guess another letter: /
OK. You think you know, just say it. keep looking up
Yes, you win!
```

Exercise 2

Write a program to simulate the Caesar encryption, the so-called Caesar rotation, or Rot for short. This encryption is named after Julius Caesar, who used it to communicate with his field lords. Encryption works by replacing each letter of text with a predefined rotation or shift. For Rot3 (a rotation of three), the letter A is replaced by the letter D, as shown in the figure below. In a Rot3 rotation, spaces (corresponding to the rotation) are replaced by hashtags #.



Now use the Caesar rotation to encrypt texts.

```
Enter the text to be encrypted: This is a SECRET project XyZ
Enter the number of characters you want to rotate with: 3
Wklv#lv#d#VHFUHW#surmhfw#AbC
```

```
Enter the text to be encrypted: This is a SECRET project XyZ
Enter the number of characters you want to rotate with: 23
Qefp7fp7x7PBZOBQ7molgbzq7UvW
```

Note that the difference between uppercase and lowercase letters is retained.

Of course, a rotation factor greater than 26 can be entered. Even then, the program will continue to work.

```
Enter the text to be encrypted: XYZ
Enter the number of characters you want to rotate with: 53
YZA
```

Finally, make sure that the question for the rotation factor is repeated until the user enters a positive number. Use the isdigit() method.

```
Enter the text to be encrypted: try out
Enter the number of characters you want to rotate with: s
Enter the number of characters you want to rotate with:
Enter the number of characters you want to rotate with: -6
Enter the number of characters you want to rotate with: 12
fdk,agf
```