

Exercise 1. Given

```
>>> a = "watermelon"
```

in one line of code change the value of a to be:

```
>>> a  
'warm'
```

With the exception of **a** you can only use non-alphabetical characters in your code.

Exercise 2. Assume you are given a list of integers. Write code that reports how many elements in the list are strictly bigger than the first, and how many are strictly less than it.

Go ahead and encapsulate this code in a function like in the example below:

```
>>> fun([1, 2, 1, 3, 1, 4, 3, 2, 1, 5])  
(6, 0, 4)  
>>> fun([3, 1, 2, 1, 3, 1, 4, 3, 2, 1, 5])  
(2, 6, 3)  
>>> |
```

Write code that would take the result returned by the function above and turn it into a complete sentence reporting how many elements are smaller, equal to or bigger than the first element of the list.

Exercise 3. Define a function that takes a positive integer and returns the number of times it had to be transformed until it reaches 1. The transformation is as follows: divide the number in half if the number is even, multiply it by 3 and add 1 if the number is odd. Let's practice on an example. Let's start with the number 5, for example. 5 is odd, so we turn it into 16. 16 is even, half of it is 8, which is even and half of it is 4, which is even and gives us 2, which is even and gives us 1, and we stop at 1. So 5 had to be transformed 5 times. Here's my function in action:

```
>>> fun(5)  
5 is odd, and 5 * 3 + 1 makes it: 16  
16 is even, so we divide it in half: 8  
8 is even, so we divide it in half: 4  
4 is even, so we divide it in half: 2  
2 is even, so we divide it in half: 1  
1 is the end of our sequence of transforms.  
5  
>>>
```