1. For the following, assume $s = \text{"testing\"}$.
   (a) What is the value of $s[2,3]$?
   (b) What is the value of $s[20]$?
   (c) What is the value of $s$ after $s[1..-2] = \text{"x\"}$

2. $a$ is an array consisting of a mix of strings and arrays. Write a method `all_sizes(a)` that returns an array of the sizes of the elements of $a$, regardless of whether each element is a string or an array. Example:

   ```ruby
   >> all_sizes ["abcd",[0,0], "x", [[1,2]] ]
   => [4, 2, 1, 1]
   ```

   Reminder: $x$.is_a? Array (or String) can be used to test the type of $x$.

3. Extra credit (1 point): What is "duck typing"?

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