1. The following function is invoked as `mystery("abc")`. In the boxes, write the value of the parameter `x` each time `mystery` is invoked, in the order in which Python executes the statements. The first entry is already completed.

```python
def mystery(x):
    n = len(x)
    if n <= 1:
        return n
    else:
        a = mystery(x[:n//2])
        b = mystery(x[n//2:]
        return a + b
```

<table>
<thead>
<tr>
<th>x</th>
<th>&quot;abc&quot;</th>
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What value is returned from the call `mystery('abc')`? ________________________________

2. Draw the shape produced by the following code, assuming that the turtle starts pointing to the right. Label the lengths of the segments.

```python
from turtle import *

def mystery(x):
    if x <= 100:
        forward(x)
        left(45)
        forward(x+25)
        left(45)
        mystery(x+25)

mystery(50)
```

3. Complete the recursive function definition below (without using the built-in `in` operator). E.g.:

```python
>>> rec_in([34, 14, 52], 14)
True
>>> rec_in([], 100)
False
>>> rec_in([34, 14, 52], 40)
False
```

```python
def rec_in(a_list, value):
    """ Returns a Boolean indicating whether `value` is contained in `a_list` """
```