### Scoping Practice

For each of the following code snippets, write what the Sprite would say after the script executes. If you believe the code produces any sort of error message, write “Error.” If there are multiple “say” blocks, write the result of each block in a separate box.

#### a. Assume we create a global variable named “global” (and no other global variables) and then run the script below.

**Code Snippet:**
- Set global to true
- Say global
- Say local

**Expected Output:**
- Global: true
- Local: False

#### b. Assume we create a global variable named “Dan” and then run the script below.

**Code Snippet:**
- Set Dan to Garcia
- Set Dan to Professor
- Say join words Dan Function Dan

**Expected Output:**
- Combined: Dan Garcia

#### c. Assume we create a global variable named “input” and then run the script below.

**Code Snippet:**
- Set input to 0
- Set result to 0
- Change result by mystery1 input
- Say result = input

**Expected Output:**
- Result: 10

### Mutability Practice
What are the values of the script variables \( x \) and \( y \) after the given script finishes running?

```
set x to 123
set y to list 1 2 3
set x to six
set y to six
```

```
set input to 6

set input to 6
```

<table>
<thead>
<tr>
<th>x</th>
<th>y</th>
</tr>
</thead>
<tbody>
<tr>
<td>( 123 )</td>
<td>( list 1 2 3 )</td>
</tr>
<tr>
<td>( six )</td>
<td>( six )</td>
</tr>
</tbody>
</table>

a.  
```
set x to 123
set y to list 1 2 3
add six to x
add six to y
```

```
if is input a list?
  add 6 to input
else
  change input by 6
```

<table>
<thead>
<tr>
<th>x</th>
<th>y</th>
</tr>
</thead>
<tbody>
<tr>
<td>( 123 )</td>
<td>( list 1 2 3 )</td>
</tr>
<tr>
<td>( six )</td>
<td>( six )</td>
</tr>
</tbody>
</table>

**Challenge Problem Mutability (recycled from last week)**

Given the following expression, what does NAMES evaluate to?

```
set NUMBERS to list 2 1
set NAMES to list Dan Garcia
for I = 1 to 2
  replace item item 1 of NUMBERS of NAMES with I
```

```
length: 2
```

```
length: 2
```

```
length: 2
```

```
length: 2
```

```
length: 2
```
Quest Problem Scoping (straight from your Quest)

What gets *said* when we run the above script?

**Extra for Practice:**

Up to you! What other questions from the Quest would people like to go over?