Problem 1: Assume the following code is loaded in JES

```python
def alpha(foo):
    foo = foo + foo
    print "alpha: ", foo

def beta(foo, bar):
    foo = bar
    bar = foo
    print "beta: ", foo, bar

def gamma(foo, bar):
    baz = foo
    foo = bar
    bar = baz
    print "gamma: ", baz, foo, bar

def delta(foo, bar):
    qux = foo + bar
    print "delta: ", foo, bar, qux
```

Using a pencil/pen and paper, trace what happens when you run the following commands in the JES command area. Once you have completed tracing the functions by hand, use JES to test your work. ***If you have issue after copying and pasting the code into JES, close the application completely and manually type the code into JES.

```python
>>>
>>> alpha(5)
>>> beta(2, 5)
```
>>> gamma(5, 2)
>>> delta(3, 6)

**Problem 2**

The volume of a cube is the product of the length, width, and height.

Write a function called `volumeOfCube` that takes three arguments (representing length, width, height) and prints out a message telling you the volume of the cube. Use good variable names (v, l, w, h are not good) and print messages that are exactly the same as the examples below given the same input.

<table>
<thead>
<tr>
<th>If you type this into the command window</th>
<th>JES should print this</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;&gt;&gt; volumeOfCube(2, 4, 6)</td>
<td>The volume of your cube is 48</td>
</tr>
<tr>
<td>&gt;&gt;&gt; volumeOfCube(3, 6, 9)</td>
<td>The volume of your cube is 162</td>
</tr>
<tr>
<td>&gt;&gt;&gt; volumeOfCube(1, 2, 3)</td>
<td>The volume of your cube is 6</td>
</tr>
<tr>
<td>&gt;&gt;&gt; volumeOfCube(2.5, 6.3, 9)</td>
<td>The volume of your cube is 141.75</td>
</tr>
</tbody>
</table>

**Problem 3**

A regular hexagon is a closed shape with 6 sides of equal length, which can be thought of as the merging of 6 identical equilateral triangles. The area of one of these triangles is shown on the right and the area of the entire hexagon would be six times that.

Write a function called `printHex` that takes two arguments (representing the base and height of an equilateral triangle) and prints out a message telling you the area of a regular hexagon made up of 6 of those triangles. Use good variable
names (s and h are not good) and use the comma to print a message that is exactly the same as my examples below given the same input.

<table>
<thead>
<tr>
<th>If you type this into the command window</th>
<th>JES should print this</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;&gt;&gt;&gt; printHex(2, 10)</td>
<td>Tri base: 2, height: 10, Hex area 60</td>
</tr>
<tr>
<td>&gt;&gt;&gt;&gt; printHex(2, 3)</td>
<td>Tri base: 2, height: 3, Hex area 18</td>
</tr>
<tr>
<td>&gt;&gt;&gt;&gt; printHex(4, 2)</td>
<td>Tri base: 4, height: 2, Hex area 24</td>
</tr>
<tr>
<td>&gt;&gt;&gt;&gt; printHex(6, 9.25)</td>
<td>Tri base: 6, height: 9.25, Hex area 166.5</td>
</tr>
</tbody>
</table>

**Problem 4**

Write a function that takes no arguments but prints out some sort of a cool picture using strings like we did in class with the flower example.

***Warning*** do not try to use back slashes (\) in your printing – it may have weird results.