1. State the final value for each variable after executing the Matlab commands given below, starting from the following initial variable assignments:
   Food = ‘apple’;
   Texture = ‘crisp’;
   Dozen = 12;
   a. Lucky = Dozen +1

   b. Dessert = [Food, Texture]

   c. Dozen(3) = 36

   d. Mystery = Dozen(2)

   e. Grain = crisp(2,3,1); Grain(4) = Food(end)

   f. Pile_of_Stuff = {Food, Dozen}

2. Let M be a two dimensional array of numbers. Briefly describe the answer generated by each of the following Matlab commands
   a. size(M)

   b. loc = find ( M > 47 )

   c. B = numel(loc)

   d. M+1
3. Acme manufacturing makes two different products, which require the following amounts (in pounds) of four different raw materials:

<table>
<thead>
<tr>
<th></th>
<th>Umbrellas</th>
<th>Golf Clubs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rubber</td>
<td>0.25</td>
<td>1.0</td>
</tr>
<tr>
<td>Titanium</td>
<td>0.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Wood</td>
<td>2.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Duct Tape</td>
<td>0.5</td>
<td>5.0</td>
</tr>
</tbody>
</table>

a. Write some Matlab code to create a 2 row x 4 column element array called Materials to hold this information.

b. Write some Matlab commands (that could be saved as the M-script file “getOrders.m”, say) to prompt the user to enter the number of umbrellas and golf clubs that need to be produced today, and store the information into a 2 row x 1 column array named Orders.

c. Write the Matlab code to generate a 1 row x 4 column array called ShoppingList containing the total number of pounds required for each of the four different raw materials to make today’s production of both products. [HINT: This is very easy using matrix multiplication.]

4. How many copies of ‘Hello’ and ‘World’ are output by the following Matlab code?
```matlab
for i = 2:3
    'Hello'
    for j = 4:6
        if j == 2 * i
            break
        end
        'World'
    end
end
```