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Section: 17460
Assignment: Lab 3

Problem 3.1 Create an m-file and enter the example above. Run it to make sure it works properly. Modify this program so that it counts up and displays the number of times the user told the computer to repeat. Copy/paste your m-file and a copy of the COMMAND WINDOW output.

```
clear
response = 1;
count = 0;
while (response ~= 0)
    disp('Hello Mr. Anderson!')
    response = input('Enter a number ~= 0 to repeat, Enter 0 to stop:
');
    if response == 0
        break
    end
    count = count + 1;
end

disp(['The user told the computer to repeat ', num2str(count), '
times.'])
```

```
>> ZhouLab3P1
Hello Mr. Anderson!
Enter a number ~= 0 to repeat, Enter 0 to stop: 5
Hello Mr. Anderson!
Enter a number ~= 0 to repeat, Enter 0 to stop: 4
Hello Mr. Anderson!
Enter a number ~= 0 to repeat, Enter 0 to stop: 6
Hello Mr. Anderson!
Enter a number ~= 0 to repeat, Enter 0 to stop: 0
The user told the computer to repeat 3 times.
```

Problem 3.2 Create vector A with spaces instead of commas and make sure you get the same response from MATLAB.

```
>> A = [1 2 3 4]

A =

     1     2     3     4
```

Problem 3.3 Create a vector using ":" that goes from 5 to 35 in steps of 7. Show the command you used.

```
>> 5:7:35

ans =

     5    12    19    26    33
```

Problem 3.4 The following example won't work. Why not? Hint: How would you display the second element in the vector y?

In this script, for every x in the vector from 1 to 6 in steps of 0.5, a new vector with the solutions to the equation should be created. However, index values can only be integers, but at each index, any number can be stored. Thus, to make this script work, one would have to fix the index of y so that it is an integer value.

Problem 3.5 Enter the following commands in your m-file and run it if myValue equals 9.
What size is y and what will be in each entry of y?

The size of y is 9 and each entry of y will have the solution to the exponential function to the power of x.