

# JavaScript Hands On Exercise

*(Due Sunday, Oct 30) 1 per group, other group members should submit the name of the person who did the submitting)*

**Get into groups of 1-3 (preferably 2) and complete the following JavaScript Exercises**

**On one of your computers, create a JS1Folder, and create a basic html page from your template. Then using either notepad++ or textwrangler, inside the body of your html page, add the following javascript code:**

1. Create a JavaScript in the body of your html page. Inside it use document.write to write a header with head tag, saying something to the effect of "First JavaScript" (or whatever you want to call your web page. Save it and load it into the browser. Make sure it works.
2. Write a javascript that creates a different variable for each of the members of your group. Use document.write to write a paragraph stating, "Our group members are: " and then each variable (aka member name) being printed in the paragraph.
3. Add to the above javascript a document.write that writes out a header, stating "Tip Calculator"
  - a. Add to the javascript a prompt that asks the user the price of your meal.
  - b. Add another prompt that asks the user whether the service was excellent.
  - c. If the service was excellent, calculate the tip by multiplying the price of the meal by .25 and storing the result in a variable. Use document.write to write "Total tip should be: " plus whatever the tip was calculated to be.
  - d. If the service was not excellent, calculate the tip by multiplying the price of the meal by .15, storing the result in a variable, and using document.write to write out the total tip.
4. Add to the javascript a variable that holds a random number between 1 and 6. It uses that random number in a document.write to write a header of that size (e.g., <h1>,<h2>, etc) that says, "Random Number Section".
5. In the javascript generate a random number between 20 and 300 for the width (how do you do that?). It then generates a second random number between 20 and 300 (for height). It then uses document.write to put an image on the web page, with the width being the random number generated for width, and the height being the random number generated for height.
6. Add to the javascript a variable that holds a random number between 1 and 6. It uses that random number in a document.write to write a header of that size (e.g., <h1>,<h2>, etc) that says, "Rock Paper Scissors". (This is pretty much the same as 5, with different text).
7. Now create the game Rock/Paper/Scissors:
  - a. Find an image of a rock, an image of paper, and an image of scissors
  - b. Prompt the user to enter 0 for rock, 1 for paper, and 2 for scissors
    - i. If the user entered 0, use document.write to write out the html to display the image of a rock.
    - ii. If the user entered 1, use document.write to write out the html to display the image of paper
    - iii. If the user entered 2, use document.write to write out the html to display the image of scissors
  - c. Now generate a random number between 0 and 2 (including 2, so you'll have to use a range value of 3 because the last number is never included).
    - i. If the random number is 0, use document.write to write out the html to display the image of a rock.
    - ii. If the random number is 1, use document.write to write out the html to display the image of paper
    - iii. If the random number is 2, use document.write to write out the html to display the image of scissors
  - d. Finally, check. If the user's input number and the random number are the same, use document.write to write out, "tie".
  - e. Otherwise, paper(1) beats rock(0), scissors(2) beats paper(1), and rock(0) beats scissors(2). Use an if statement to write out whether the user won or the computer won.