CMSC 122 Quiz 3 Worksheet

The next quiz for the course will be on Wed, Apr 10. The following list provides additional information about the quiz.

- The quiz will be a written quiz (no computer).
- Closed book, closed notes quiz.
- Answers must be neat and legible.
- Quiz instructions can be found at http://www.cs.umd.edu/~nelson/classes/utilities/examRules.html.
- Regarding Piazza - Feel free to post questions in Piazza regarding the worksheet and possible solutions to problems.
- We use the Gradescope system to grades your quizzes after they have been scanned. For the system to recognize your work, you **need to print your name (uppercase) and student id.** The following is an example of the information you need to provide in your quiz:

FIRSTNAME, LASTNAME (PRINT IN UPPERCASE): MARY, SMITH

STUDENT ID (e.g. 123456789): 123456789

The following exercises cover the material to be included in this quiz. Solutions to these exercises will not be provided, but you are welcome to discuss your solutions with the TAs or instructor during office hours. It is recommended that you try these exercises on paper first (without using the computer). When ask to write JavaScript code only provide what will appear in the <script> </script> section (no need for <html>, <head>, <body>, nor DOCTYPE). Make sure you use good indentation (alignment) when writing your programs. Also use good variable names.

Exercises

1. What is a local variable? What is a global variable?
2. Can we use the same variable name in two different functions?
3. What takes place when a return statement is executed in a function?
4. What is a parameter? What is an argument?
5. Write a function that returns the average of two values. The function's prototype is **function getAverage(x, y)**.
6. Write a function that returns the area of a triangle. The function takes as parameters the base and height.
7. Write a function that has a number as a parameter. The function returns true if the parameter is even and false otherwise.
8. Write a function called **histogram** that takes two numbers as parameters and draws a histogram based on those two numbers.   For example, calling the histogram(2, 4) will draw the following histogram:

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   **
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   ```
9. The function **getRandom** has two parameters: x and y. It will return a random integer number in the range defined by x and y.