CMSC 122 Quiz 3 Worksheet

The third quiz for the course will be on Wed, Apr 6 (Nelson’s section) and Thursday, Apr 7 (Fawzi’s section) at the beginning of the class. The following list provides more information about the quiz:

- The quiz will be a written quiz (no computer).
- Closed book, closed notes quiz.
- Answers must be neat and legible. We recommend that you use pencil and eraser.

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 TA or instructor during office hours. When asked to write JavaScript code only provide what will appear in the <script> </script> section (no need for <html>, <head>, <body>, or DOCTYPE). We recommend you answer the problems on paper first, and then verify your solutions using the computer.

**Exercises**

1. What is a global variable?
2. What is a local variable?
3. When a local variable is created?
4. What is an array?
5. Define an array with 4 elements.
6. Define a function that has the following prototype:

   ```javascript
   function minimum(x, y, z)
   ```

   The function will compute and return the minimum value. For example, `minimum(10, 7, 20)` will return 7. Write a main() function that tests your minimum function. For example, the main() function can ask the user for three values and then call the minimum function. **NOTE:** the minimum function should not read or display any values. The function just computes the minimum.

7. Define a function that has the following prototype:

   ```javascript
   function divisibleBy(x, y)
   ```

   The function will return `true` if x is divisible by y and `false` otherwise. For example, `divisibleBy(4, 2)` will return `true` and `divisibleBy(5, 3)` will return `false`. **NOTE:** the function does not read or display any values.

8. Define a function that has the following prototype:

   ```javascript
   function sum(limit)
   ```

   The function will return the sum of values between 1 and limit. For example, `sum(3)` will return 6. **NOTE:** the function does not read or display any values.

9. Define a function that has the following prototype:

   ```javascript
   function sum(dataArray)
   ```

   The function will return the sum of the values present in the array parameter. **NOTE:** the function does not read or display any values.