**CMSC 198N Quiz 5 Worksheet**

The fifth quiz for the course will be on Friday, April 20 at the beginning of the class (2:00 pm). 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).

**Exercises**

1. Write a function named “find” that has the following prototype:

   ```javascript
   function find(data, target);
   ```

   The function will return true if target is one of the values in the array and false otherwise.

2. Write a function named “doubleValues” that has as parameter an array of integer values and that updates each array entry with twice the original value.

3. Write a function named “equals” that has the following prototype:

   ```javascript
   function equals(first, second);
   ```

   The function has two integer arrays as parameters and it returns true if the arrays have the same values. For example, for:

   `first → 10, 3, 7` and `second → 10, 3, 7` equals will return true
   `first → 10, 7, 3` and `second → 10, 3, 7` equals will return false
   `first → 10, 3, 7` and `second → 10, 3, 7, 8` equals will return false

4. Write a function named “filter” that has the following prototype:

   ```javascript
   function filter(data, cutoff);
   ```

   The function will create and return a new array with entries from the data integer array with a value less than or equal to cutoff. The function will return `null` if there are no entries that satisfy the specified criteria.