The first quiz for the course will be on Wed, Oct 3. 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](http://www.cs.umd.edu/~nelson/classes/utilities/examRules.html)

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. It is recommended that you try this exercises on paper first (without using the computer).

**Exercises**

1. What is the different between a do while and a while loop?
2. What is short-circuiting?
3. Write a complete program that computes the factorial of a number. For example, factorial of 4 (4!) is 24.
4. Write a program that asks the user for a password value. The expected value is “terps”. If the user provides the expected value, the program is expected to generate the value “Access Granted”; otherwise the program will print the message “Access Denied”. Use a do while to implement your solution.
5. Write a complete program that prints the sum of odd numbers between min (inclusive) and max (inclusive). The program will read the values min and max and display the sum. You can assume min and max are integer values. Use a while loop to implement your solution.
6. Write a complete program that reads four numbers and displays a histogram based on those numbers. For example, if the user enters 2 5 4 1 the program will display:

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   Use for loops to implement your solution.