**Assignment 2 (Due on 6/3)**

* Requirement: Implementation with PERL script
* Total: 100 points (**20 points** for questions 1-3 and **40 points** for question 4)
* Submission instructions:
  + - 1. Write a “**README file”** including the answers to problems 1-4, and a detailed note about the functionality of each of the above scripts.
      2. Make sure you include your name in each program and in the README file. **Each question has one PERL script file and one README file.** Make sure all your programs are fully commented, and compile and run correctly on the Linux O.S..
      3. Submit your assignment to the portal system by the due date.

1. Write a Perl script to display “Hello PERL!” using  
   a. Simple print command  
   b. Assign “Hello PERL!” to a variable and print it via the variable
2. Write a Perl script for checking whether the input string is palindrome.  
   Example:  
   $perl palindrome.pl ab#ba  
   Palindrome  
   $perl palindrome.pl abefba  
   Not palindrome
3. Write a subroutine in Perl that does Quick Sort and returns a list. Use this list to test your subroutine: (19, 23, 10, -10, 0, -30, 51).
4. Write a Perl script to read the file census.txt. The file is tab-delimited, and the fields are County name, population, water area (in square miles), land area (in square miles).  
     
   Your Perl script should parse the data, and for each county, print the county name, the population per square mile of land, and the percentage of the county that is water. (Note that the total area of the county is the sum of the land and water areas.)  
     
   At the end, the perl script should show the county name which satisfies the following criteria.

* Highest population density
* Lowest population density
* Highest percentage of water
* Lowest percentage of water