Assignment 12---**100** points
(Java Programming Practices)
(**Due Friday, 12/10/2010, Midnight at Moodle**)

Your name:	Score:

 Important Notice:
1. **You must submit your work at Moodle**.
2. **You code must follow Java Code Convention** (proper indentation, blank line(s), at least 1~2 lines of comments at beginning of the class and important methods)—this will account for **20%** of the project scores!

Complete the following Java programming projects:

1. Write a recursive method printArray that displays all the elements in an array of integers, separated by spaces. You must test this method in a test class (you may define an array of integers to test the method; your program don't have to prompt inputs of the array of integers) (Ch18.16Q).

2. Write a recursive method stringReverse that takes an array of characters as an argument (i.e., a text string) and prints this text string backward (Hint: Use String method toCharArray, which takes no arguments, to get a char array containing the characters in the String). You must test this method in a test class (your program must prompt for the input of the text string) (Ch18.17Q).

3. Write a recursive method recursiveMinimum that determines the smallest element in an array of integers.You must test this method in a test class (you may define an array of integers to test the method; your program don't have to prompt inputs of the array of integers) (Ch18.18Q).

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4. Write an applet that asks the user to enter two floating-point numbers, obtains the two numbers from the user and draws their sum, product (multiplication), difference and quotient (division). Use the techniques shown on Fig. 23.9. You must test this applet in an HTML file. (Ch23.2Q).

5. (**Bonus 30 points**) A palindrome is a string that is spelled the same way forward and backward (e.g., "radar"). Write a recursive method testPalindrome that returns Boolean value true if the string stored in the array is palindrome and false otherwise. The method should ignore spaces and punctuation in the string. You must test this method in a test class (your program must prompt for the input of the text string) (Ch18.14Q).

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Practice with the following exercises for preparation of Final Exam—*no submission* is required. (Try to enter the sample code to verify your solutions!).

- 18.7 on p. 807
- 18.8 on p. 807
- 18.12 on p. 807
- 18.13 on p. 808