## CS 3824 Homework Assignment 2

**Given:** February 9, 2010 **Due:** February 18, 2010

General directions. The point value of each problem is shown in []. Each solution must include all details and an explanation of why the given solution is correct. In particular, write complete sentences. A correct answer without an explanation is worth no credit. The completed assignment must be placed inside the box labeled "CS 3824" outside 2160J Torgersen by 4:00 PM EST on February 18, 2010. No late homework will be accepted.

Digital preparation of your solutions is mandatory. Use of LATEX is optional, but encouraged. No matter how you prepare your homework, please include your name.

## Use of LATEX (optional, but encouraged).

- Retrieve this LATEX source file, named homework2.tex, from the course web site.
- Rename the file < Your VT PID>\_solvehw2.tex, For example, for the instructor, the file name would be heath\_solvehw2.tex.
- Use a text editor (such as vi, emacs, or pico) to accomplish the next three steps.
- Uncomment the line
  - % \setboolean{solutions}{True} in the document preamble by deleting the %.
- Find the line
  - \renewcommand{\author}{Lenwood S. Heath}
    and replace the instructor's name with your name.
- Enter your solutions where you find the LATEX comments
  % PUT YOUR SOLUTION HERE
- Print out and submit your solutions by 4:00 PM on February 18, 2010.

[25] 1. Jones and Pevzner problem 5.4. You should use the algorithm ImprovedBreakpointReversalSort instead of BreakpointReversalSort.
[25] 2. Jones and Pevzner problem 5.11. Explain the reasoning behind your answers.