

# CS 3824

## Homework Assignment 2

**Given:** September 8, 2015

**Due:** September 26, 2015

**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 turned in as a PDF through Scholar by 5:00 PM on September 26, 2015. **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
```
  - Convert your solutions to PDF and submit your solutions through Scholar by 5:00 PM on September 26, 2015.
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**[50] 1. Jones and Pevzner problem 5.4.**

You should use the algorithm IMPROVEDBREAKPOINTREVERSALSORT instead of BREAKPOINTREVERSALSORT.

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**[50] 2. Jones and Pevzner problem 5.11.**

Explain the reasoning behind your answers.

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