

## Lab Programming Assignment #1

**Due:** Sunday, February 9, 2020, by 11:59 pm PST

**Points possible:** 20

### Submission Requirements:

- You can work in teams of up to 3. If working in teams, only one person should submit the required file(s).
- You should submit just one file:
  - InsertionSort - <the submitter's name>.java
  - Example file name: InsertionSort - John Doe.java
- Within the Java file, include your name (as a comment). If working in a team, the full names of all team members must be within the java file.
- Submit the Java file to BeachBoard. No email submissions will be accepted.
- The project must be in the Java programming language.
- I should be able to both pass in arguments and run your program via the command line.

### Program Requirements:

Modify the insertion sort algorithm such that:

1. It utilizes a doubly linked list instead of an array.
2. The algorithm must be able to sort a list of lower cased words (strings) in alphabetical order.
3. It should be able to support the sorting of up to 20 words.

I will be testing your code via the command line so it is a requirement that your code be able to take in arguments and execute via the command line. Failure to do this will result in zero credit.

Comment your code enough so that in case it doesn't work, I can see what you're trying to do and possibly give you partial credit.

### Example:

```
C:\MyFolder> java InsertionSort apple test going zebra aardvark  
aardvark apple going test zebra
```

Where "C:\MyFolder" is just an example of where the program is being executed from. "apple test going zebra aardvark" are the input parameters and the output is "aardvark apple going test zebra". Your program should not output anything else.

**Failure to follow the above requirements may result in substantial point deduction, up to and including receiving zero credit. I recommend you read the instructions more than once to ensure your program meets the requirements.**

**Grading Guidelines:**

- Does the program meet the requested requirements/criteria?
- Are the submission instructions followed?
- Is your code properly commented?
- Does your code compile?
- Does your code pass my test cases?
- Ensure your code works with duplicates.
- I will only test with lower cased words.