

**Instructions:**

- Log into a lab machine using your eid and password.
- Open jGRASP and close any tabs that may already be open in the editor.
- Complete each of the methods in the provided Java file according to the Javadoc comments. The starter code can be found at this URL:  
??????????

**The source code you submit must be entirely your work and must be written entirely during the class period.** The use of any pre-existing code (other than that provided as part of the exam) is prohibited. This is a “closed book” examination and you must work entirely on your own.

**You may only use a terminal window or jGRASP, and a WWW browser.**  
**The only page you may load in the WWW browser is the course Autolab site**  
(<https://autolab.cs.jmu.edu>).

**Your code need not comply with the course style guidelines and need not include comments.**  
You should not submit any tests.

**You must submit your code using Autolab;** your code must be submitted in a single .java file.

**Your actual grade may be lower or higher than the grade awarded by Autolab.** In other words, you may get partial credit even if your code fails all of the official tests and you may not get full credit even if your code passes all of the official tests.

**Your last submission is the one that will be graded.** No limit will be placed on the number of submissions but, obviously, you must complete the exam during the lab period and submissions waste time. Autolab will not provide hints.

**SUGGESTIONS:**

1. Submit after completing each method. You will not get credit for code that has not been submitted.
2. Test locally before submitting to Autolab.

**I have read and agree to the above conditions.**  
**This work complies with the JMU Honor Code.**

**Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_