## Grading Guide for the Report for Lab 2

#### Parts of the report

- **Introduction:** This section should briefly describe what the program does. It should also include a description of the *symptoms* of the bug you are writing about: what the program should have done, versus what actually happened.
- Identifying the bug: This section should describe your process of finding *where* the bug is, and *what* it is. Include information about how you located the bug, including how you traced through the relevant section of code to zero in on the bug. A good description includes references to the behavior of the program as well as references to relevant details from the code. Most importantly, it will show your thought process and reasoning in debugging the program.
- **Fixing the bug**: This section should describe the change(s) you made to eliminate the bug. Also include a descriptions of changes you made that did *not* fix the bug. Include the reasoning behind your changes, and describe the behavior of the program after making the changes.
- Conclusion: This section should explain how you *knew with confidence* that you had correctly fixed the bug. Mention test cases that you ran to demonstrate correct behavior. Most likely these will be the same test cases you used to identify the bug initially.

#### Guidelines

- If necessary, you may do extra work after the lab, which is not included in your notes. However, in this case, you must *explain in the report* why it is not consistent with your notes.
- The report should be written *jointly* with your lab partner.
- Only write about one bug. We will tell you which bug you should write about.
- Clearly explain your reasoning, and include all relevant details that will allow the reader to understand your debugging process.
- Write in complete sentences and paragraphs, using correct standard English.
- Do not copy and paste large segments of code or input and output into the report. You may include one or two lines of code if it is necessary to illustrate a point.
- Submit your report following the instructions on the lab handout.

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### **Grading Rubric (maximum 25 points)**

Category	Characteristics of excellent reports	Characteristics of acceptable reports	Characteristics of reports that need improvement
Introduction	A. Includes a high level description of the intended behavior.  B. Includes a description of the symptom(s). (3)	C. Incomplete description of the intended behavior.  D. Incomplete description of the symptom(s).  (2)	<ul> <li>E. Missing or inaccurate description of the intended behavior.</li> <li>F. Missing or inaccurate description of the symptom(s).</li> <li>(0 or 1)</li> </ul>
Finding the bug	<ul> <li>G. Explains how the bug was identified.</li> <li>H. Includes relevant details from the code. (6 or 7)</li> </ul>	I. Inaccurate or incomplete description of how the bug was identified.  J. Few details from the code. (3 to 5)	<ul> <li>K. Does not explain     how the bug was     identified.</li> <li>L. No details from the     code.     (0 to 2)</li> </ul>
Fixing the bug	<ul> <li>M. Includes all changes made, even if they did not fix the bug.</li> <li>N. Gives reasoning behind changes.</li> <li>O. Describes the outcome of all changes. <ul> <li>(6 or 7)</li> </ul> </li> </ul>	P. Omits some changes. Q. Does not clearly explain reasoning behind changes. R. Does not describe the outcome of some changes. (3 to 5)	S. Incomplete or missing description of changes.  T. Missing reasoning behind changes.  U. Does not describe the outcome of changes. (0 to 2)
Conclusion	<ul> <li>V. Includes useful test cases that show the bug is fixed.</li> <li>W. Includes other relevant information that shows the bug is fixed.</li> <li>(4)</li> </ul>	<ul> <li>X. Unconvincing or incomplete argument that the bug is fixed.</li> <li>Y. Does not mention any test cases.</li> <li>(1 to 3)</li> </ul>	Z. No evidence that the bug is fixed. (0)
Writing Mechanics and Style	AA. None or few spelling and grammar mistakes.  BB.Report is easy to read.  CC. Topics logically flow from one to another. (4)	DD. Spelling or grammar mistakes interfere with readability EE.Choppy organization. FF. Hard to follow in places. (1 to 3)	GG. Many English mistakes reduce readability. HH. No apparent organization II. Jumps in topics and focus. (0)