EE201 Lab #3

Please put the following material on the pages indicated and in the order specified here. Points will be deducted if pages are out-of-order. Note that all material needs to be computer generated – in most cases using any program that provides a clean and professional look. Recommended programs are provided.

1. Cover Page, Title header with Photo of yourself. The title header of your cover page should include Lab number (Lab #3) and name, Your name, Class number (EE201 Digital Logic Design), University (California State University Long Beach), and today's date. Plus indicate which level you attempted (Simplest, Above Average, or Best).
2. Introduction. Your introduction should provide an abstract, a discussion of how a majority circuit works. Figures on this page should include a depiction of the 7-segment display showing the numbering of the segments and how the results are formed from the segments.
3. Truth Table (MS Word – Insert Tab – Table or MS Excel) If one or both of the Figures previously discussed described do not fit on this page they may be placed on this page.
4. Boolean Expressions (MS Word – Insert Tab – Equation) in SOP canonical form, with corresponding K-maps, and standard form solutions (2-level simplified).
5. Circuit Diagram (Autocad Electrical, MS Visio, Orcad, or any CAD program) of the circuit using a 7447. You **do** need a gate representation of your Boolean expressions.
6. Breadboard (Fritzing or Visio Diagram) with a photo of your breadboard.
7. Conclusion. Please discuss any lessons learned by doing this lab and in particular if your circuit worked first time or what steps were needed to debug it.