

Formal Lab Report Criteria

Do's

1. Do make the ABSTRACT a single paragraph, no indent, and within one page.
2. Do make discussions in the BODY to the point and as detailed as possible, include data, math, psuedo-code, flowcharts, and diagrams where prudent.
3. Do indent the BODY, ANALYSIS, and CONCLUSION.
4. Do make snapshots of running code and diagrams highly clear and readable.
5. Do align Software/Assembly code columns.
6. Do keep comments in the comments column even if you have to wrap around to the next line in the comment column.
7. Do keep font/style/size consistent for all text except the software/code listings may be different.
8. Do use the given font/style/size in the lab report template.
9. Do use single space for all text.
10. Do turn off italics - you can emphasize a line with italics or the title of a reference.
11. Do use third-person passive voice.
12. **Do focus strictly on the hardware, software, procedures, data, results, analysis, conclusions when writing the report, and in your own words.**
13. Do make the content of your report have value or usefulness to the reader.
14. Do place a new HEADING at the top of a new page just as the template is written.
15. Do list your original software and firmware.
16. Do cite other authors' work that you have referenced.
17. Do make your writing lean and to the point but with as much useful information as possible.

Dont's

1. Don't take snapshots of code.
2. Don't include my template instructions.
3. Don't discuss references but rather list them specifically.
4. Don't have blank pages in the report.
5. Don't list any code/software that contain nothing from you, unless instructed to do so.
6. Don't include headers nor footers nor watermarks in the pages of your report.
7. Don't use pronouns.
8. Don't include emotion.
9. Don't refer to people/teams/groups and or places/institutions in any way.
10. Don't use words like teach, taught, learn, learned nor any words that are already understood to be the case without having to state them. This is unnecessary fat and the wrong language, trim it off.
11. Don't refer to the labx.pdf document itself in any way, wrong language.
12. Don't plagiarize.

About language:

Using the correct language is a very important part of writing.

A formal lab report should not contain the same type of language found in a personal letter to someone you know, nor a bibliography, nor a novel, nor a newspaper etc....

Just discuss the facts needed to answer the green highlighted text in each labx.pdf document plus as much supporting detail that YOU can analytically include.

Example Lab 1

ABSTRACT

AVR assembly language programming is examined and evaluated. Moreover, the Atmel A3BU MCU is experimented with under laboratory conditions using AVR assembly language. Atmel Studio 7 IDE for Windows along with the ICE programmer/debugger and the A3BU Xplained development board are all used together to evaluate the MCU's core Programming Model including its registers, instruction set, addressing modes, and its various types of internal memory. Given test code is entered into the Atmel Studio 7 IDE, the code is built and then programmed into the A3BU. Studio 7 debugging tools are employed to observe the operation of each line of assembly code during execution within the target hardware. Results and data are recorded and an analysis is performed. The experimental observations and analysis lead to conclusions about the AVR assembly language and the A3BU MCU which concur with Atmel documentation. From the conclusions, a delay subroutine is successfully engineered and implemented to periodically flash an LCD backlight in one second intervals.

Note: Use this same type of language for the rest of the report as well.

Note: And do not refer to the labx.pdf document **itself** in any way. Such as in "The lab requests the following question to be answered..." This is the wrong type of language.

Eugene.