CS3101: ASSIGNMENT 1

DEADLINE: 09 FEB AT 17:00

Description: Using LATEX, write a short essay. The essay should have at least two sections (properly typeset as LATEX sections) as follows.

- (1) The first section comprises 200–400 words with at least two paragraphs on the topic of free and open source software (FOSS). Mention some advantages and some disadvantages. Give some historical information about the FOSS movement and give an example of free open source software that you have used. Make sure that you properly cite your sources using one of bibtex, natbib, biblatex.
- (2) The remaining sections should be a very short essay (between 1 and 2 pages) describing some piece of mathematics that you like or know something about. Any mathematical idea will do—it can be very basic or quite advanced. I will not be grading for mathematical correctness, only for the typesetting.

The document must contain **all** of the following elements.

- Properly typeset title and author information.
- At least two sections.
- At least one piece of inline mathematics.
- At least one piece of displayed mathematics.
- A dynamically generated cross reference.
- A citation and a bibliography.
- And it must contain **at least two** of the following elements.
 - A figure or a diagram.
 - A theorem-like environment.
 - A table.

You must check that the LATEX compiles without errors.

Example: See the file sample.pdf for a indication of how the PDF output from the LATEX might look.

Submission: Submit *only* the source files. This will include the tex file and perhaps image files, a bib file, etc. **This does not include the** pdf **file**.

Grading: Important points about the grading of this assignment.

- Zero marks will be awarded for submitting the pdf file.
- If there are errors when compiled, marks will be deducted. If it does not compile at all, the maximum potential points are less than 40%.
- All submitted files will be uploaded to Overleaf and compiled to pdf, which will be used for grading.

Date: January 17, 2024.