

# CAS 741/CES 741

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## LaTeX

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The purpose of this lab is for you to gain familiarity with the LaTeX typesetting language. All of the documentation deliverables will be written using LaTeX.

### Components of Lab

1. Introduction to LaTeX
2. LaTeX Exercises

### Details

Please review the following links to learn about LaTeX:

- An introduction to LaTeX : <https://www.LaTeX-project.org/about/>
- LaTeX installation: <https://www.latex-project.org/get/>
- Official documentation: <https://www.latex-project.org/help/documentation/>
- LaTeX tutorials:
  - <https://www.LaTeX-tutorial.com/tutorials>
  - <https://www.youtube.com/watch?v=Y-kXtWdjwtmw>
  - <https://www.youtube.com/watch?v=SoDv0qhyysQ>

When using LaTeX, the typical approach for citations is to use BibTeX (<http://www.bibtex.org/>). Using BibTeX a database of reference (bib file) is processed by the bibtex command to generate the references in the required format.

## Exercises

1. Find a random photo online (this can be of anything). Create a document with a photo in it. Make sure to cite the photo correctly.
2. Reproduce the following table in your document:

|       | Header 2 | Header 3 | Header 4 |
|-------|----------|----------|----------|
| row 1 | cell 1   | cell 2   | cell 3   |
| row 2 | cell 4   | cell 5   |          |

3. You can use `\section` and `\subsection` to organize your documents. How many levels down can you go? Does `\subsubsection` work? How about `\subsubsubsection`?
4. Create numbered sections (or subsections) in your document as well as sections without numbers (like in this document).

Once you are comfortable with LaTeX, do the following in your repo:

1. Add folders following the BlankProjectTemplate from our course repo
2. Compile problem statement, as is
3. Write the details for your problem statement
4. Create the outline of you SRS document in LaTeX
5. Add a citation to your SRS.
6. Set-up your editor so that the text is hard wrapped at 80 characters.