An Introduction to Latex

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1 Document Text

This text is not white space dependant, as long as there is a little text per each line.
A small gap
or a large gap will both cause a new paragraph to form, so a few things will cause the document to be organized to be easier to read. Comments are useful to organize the Latex document.

The vspace command can be used to create a large gap in the output document, but this is a bad practice and should be avoided if possible.
./images/squarePegRoundHole.jpg[1] is the location and name where the file must be stored to have it be inserted into the document. Latex will scale the image to be 4 inches wide on the paper. The images can be referred to by using the 1. The image number will be automatically populated and your text will point to the correct images, even if the image is located on a different page or if other images are put into the document before this image. My favorite course is ECE 111.

Putting an * after section will remove the number from the section header.

This document will have the following sections

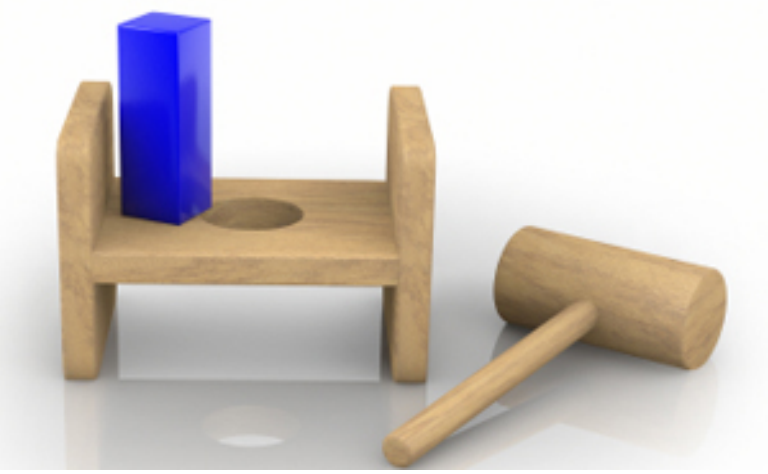
1. Document Text and Images
2. Lists
3. Math Mode
4. Tables
5. Style Sheet

2 Math Mode

There are quite a few special characters in LaTeXthat will cause errors if typed in normal text areas, such as dollar signs, percent signs, and ampersands. These characters have special uses, but can be typed if they are preceded by the backslash escape character, such as $, %, and &. % is

[1] https://plus.maths.org/content/sites/plus.maths.org/files/puzzle/2012/hammer.jpg

Figure 1: A picture of a fun game.



used to comment text. $ is used to enter math mode, discussed in this section, and & is used in tables, part of the next section.
Math mode is entered and exited by having a $ in your document, without a backslash before the sign. This makes it possible to enter mathamatical equations very quickly. Subscripts are shown with undersscores. There are 10_2 types of people in the world, those that undestand binary and those that don't. Superscripts are shown with the ŝymbol: $10^2 = 100$. Finally fractions are shown by using the frac command: $\frac{1}{2} + \frac{1}{4} = \frac{3}{4}$
Use math mode to write out the Pythagorean theorem or the quadratic equation.
Here's a website with more details about math mode commands in Latex.
https://en.wikibooks.org/wiki/LaTeX/Mathematics

3 Tables

Here's an example of a table, the "crl" in the next line control the alignment of text within each column. c = centered, r = right, and l = left. Change the next line so that each column is centered. Modify this table to show something interesting to you. If you have no interests, then use it to show the scores from the 2015-2016 OSU Football season.

Number System	$Decimal$	$Binary$
Zero	0	0
One	1	1
Two	2	10
Three	3	11
Four	4	100
Five	5	101
Six	6	110
Seven	7	111
Eight	8	1000
Nine	9	1001
Ten	10	1010

4 Style Sheet

Open up the ECE111Notes.sty style sheet and change the following line from
colorlinks=false,
to
colorlinks=true

Also, change the author field in the hypersetup area to be your name, the creator to be the name of the application used to type the .tex file, and the producer the name of the version of latex used to create the pdf, probably pdfLaTeX.

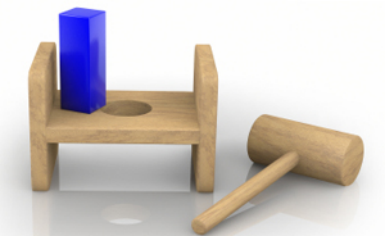


Figure 2: This centerImage command is defined in ECE111Notes.sty.

Submit the output pdf document to Canvas once you've finished this tutorial.