

By the end of this class,

- *Understand what LaTeX is and how to use it to prepare a homework.*
- *See functions in Julia and how they help make code easy and reusable.*
- *Your last questions about Julia!*
- *Go over common mistakes on the quiz.*

August 31, 2016

More LaTeX and Julia

Next class

HOMEWORK DUE!

Intro to floating point arithmetic
G&C - Chapter 5

Next next class

Labor day! Take a day off

Logistics

1. Final exam

We will have the final EARLY (December 2) based on the results of the poll which overwhelmingly picked this option.

Course Survey

Matlab only	33
Numpy/Scipy only	5
Both	16
Latex	9
Taylor series	23
Topics	Monte Carlo, ODEs, Matrices
Stuff	Julia & Mandelbrot sets!

Quiz Results

... at end of class ...

LaTeX

- A document typesetting system designed for beautiful mathematical documents.
- TeX was designed by Donald Knuth
- LaTeX was designed by Leslie Lamport
- Both won Turing awards - Nobel prize of CS
- You need to “compile” your documents.

```
pdflatex myfile.tex # produces myfile.pdf
```

Recommended packages + editors

Windows

- MiKTeX and TexStudio

Mac

- MacTeX and TexStudio or TexMaker

Linux

- TeXLive (or apt-get / yum package) + Kile or TexStudio

Online

- Overleaf
- Jupyter Notebooks

Making a simple document

```
\documentclass{article}
\usepackage[margin=1in]{geometry}
\title{My document}
\author{David and Collaborators}
\begin{document}
\maketitle
\section{Problem 1}
\section*{Solution}
\section{Problem 1}
\section*{Solution}
\end{document}
```

demo

Editing a homework

demo

Back to Julia!