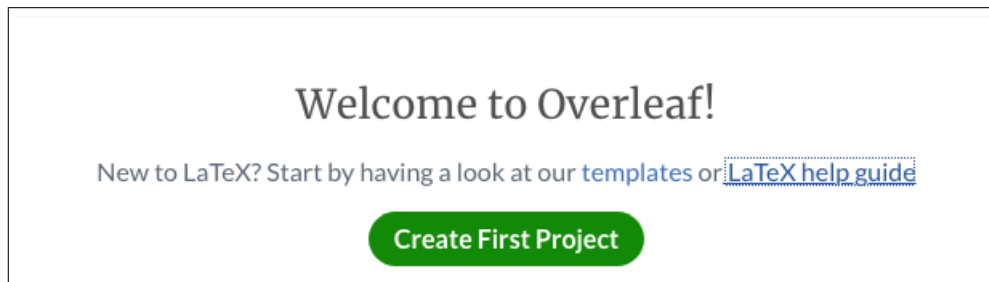


HOW TO TYPE YOUR HOMEWORK EASILY

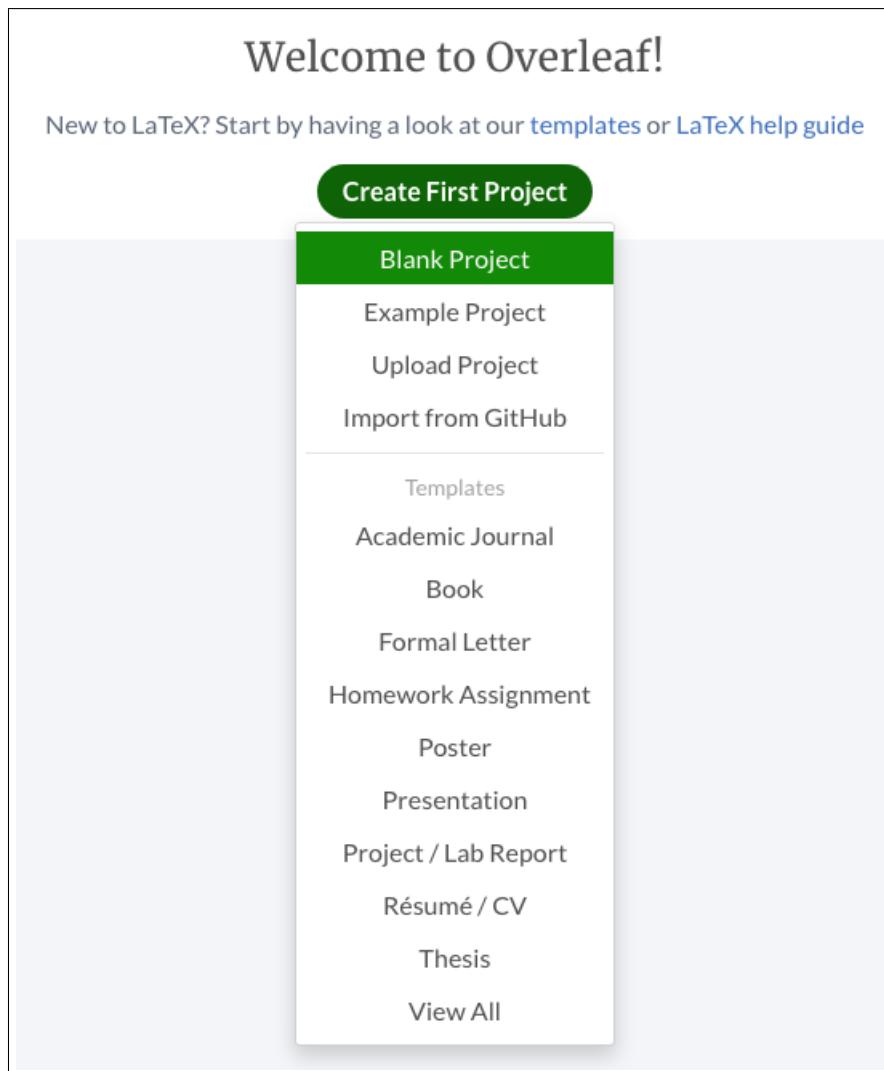
ARIEL BARTON

- (1) The easiest way to do this is to go to an online L^AT_EX compiler—I recommend `overleaf.com`. (There are other options; see `tug.org/begin.html` if you're curious or have poor internet access.)
- (2) Either register for an Overleaf account, or Log In using your Google account.
- (3) The first time you log in, you will see a green button that says “Create First Project” and not much else.

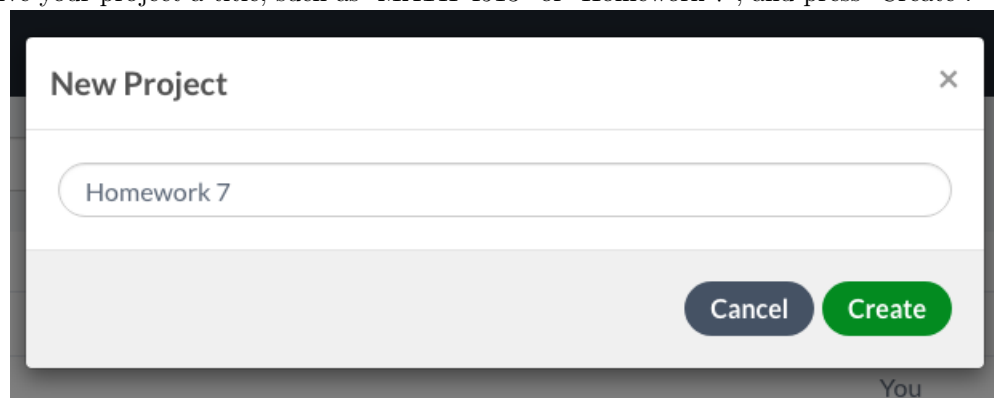


Later you should be sent to (or navigate to) `overleaf.com/project`, where you will see a green “New Project” button and a list of existing projects.

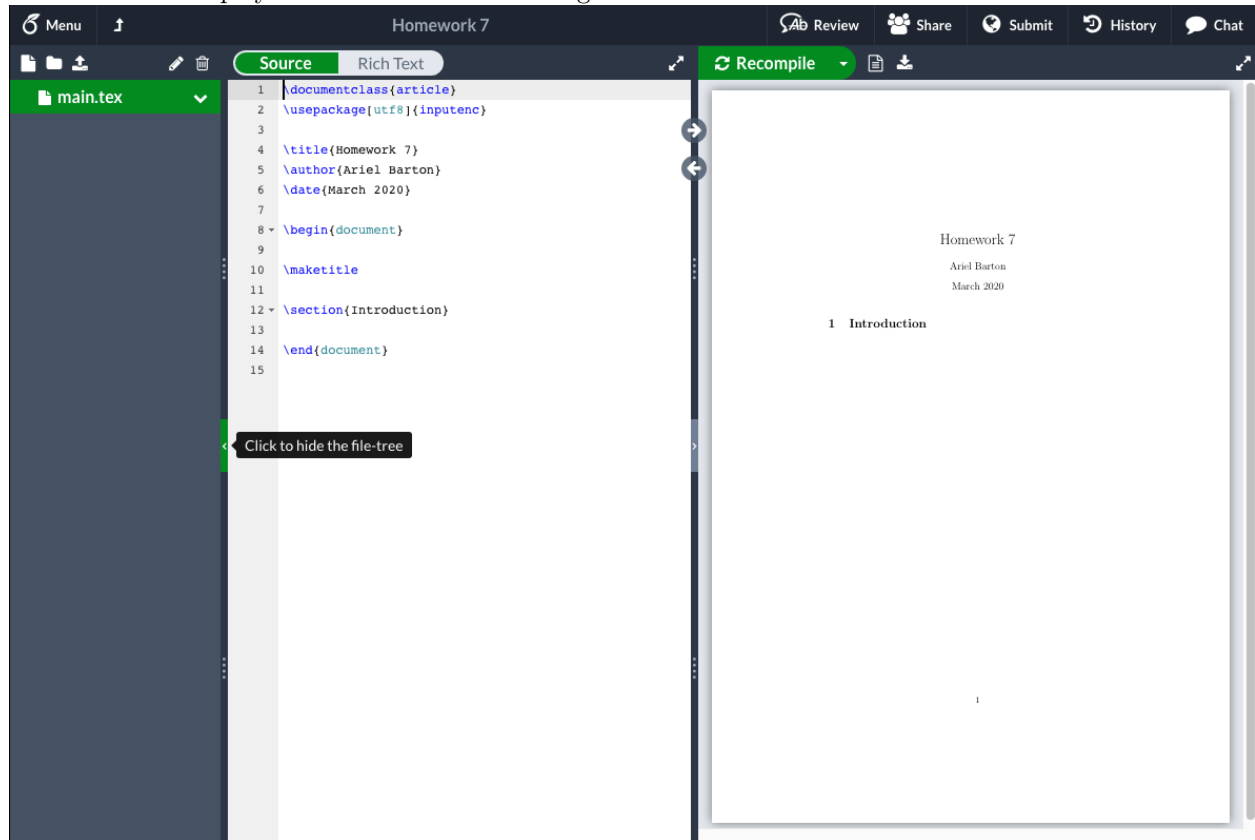
- (4) Press the “Create First Project” or “New Project” button and choose “Blank Project”.



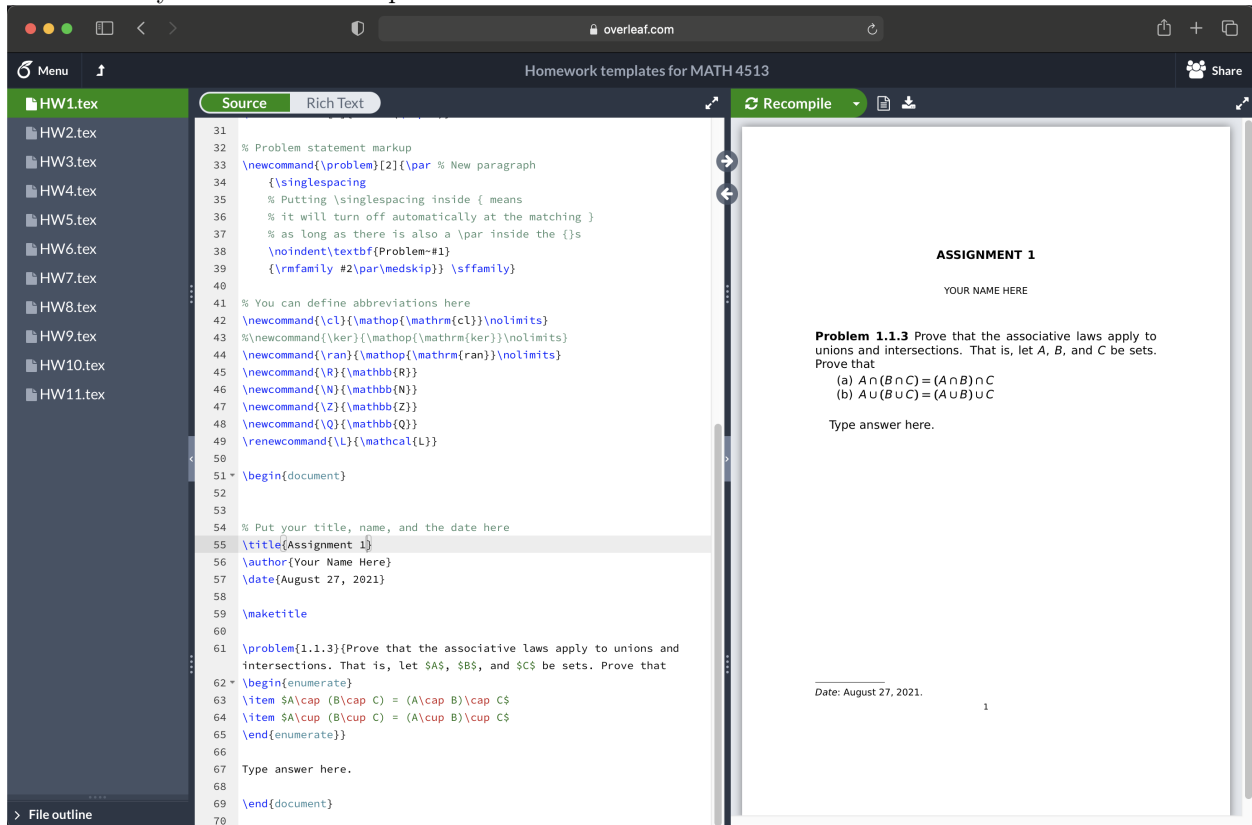
- (5) Give your project a title, such as “MATH 4513” or “Homework 7”, and press “Create”.



(6) You should see two windows. You will type into the window on the left. Your compiled document will be displayed in the window on the right.



- (7) Go to <https://www.overleaf.com/project/6112bcd911e2136542b5ea30> or to wherever I told you that your homework templates could be found



and copy and paste the contents of HW1.tex to the left hand window in your project.

- (8) Type your name where it says **Your Name Here**.
 (9) Press Recompile.
 (10) Stare at the text in the left hand window until you understand how it relates to the PDF in the right hand window.

Some hints:

- Nothing before the `\begin{document}` appears directly, so go ahead and skip down.
- Everything after a % is ignored by the program.
- Mathematics in a paragraph (even a single symbol f) should be surrounded by dollar signs $\$f\$$ or backslash-parentheses $\$(f\)$.
- Displayed mathematics (long math formulas) should be surrounded by double dollar signs or backslash-brackets: $\$99+33=132\$$ and $\[99+33=132\]$ produce

$$99 + 33 = 132$$

- You can generally get math symbols by typing their names after a backslash:
 - $\{$ for $\{$,
 - $\}$ for $\}$,
 - \subseteq for \subseteq ,
 - \supseteq for \supseteq ,
 - \setminus for \setminus ,
 - \Rightarrow for \Rightarrow ,
 - \Leftrightarrow for \Leftrightarrow ,
 - \int for \int ,
 - \inf for \inf ,
 - \sup for \sup ,
 - \lim for \lim ,

- `\sum` for \sum ,
- `\limsup` for \limsup ,

and so on. A pretty good list of symbols is available at artofproblemsolving.com/wiki/index.php/LaTeX:Symbols.

- You can get superscripts and subscripts with `^` and `_` (shift-6 and shift-minus). You can get long superscripts with braces: `\x^{12}` x^{12} .
- You can get fractions with `\frac`: `\frac{1}{3}` $\frac{1}{3}$
- You can get a prime with a simple apostrophe (you don't need the `\prime` command or a `^`): `$f'` yields f' .
- You get binary coefficients (“ n choose k ”) with `\binom{n}{k}` $\binom{n}{k}$.
- You can get large parentheses (or brackets) with `\left` and `\right`: `(\frac{3}{2}) \left(\frac{3}{2}\right)`.
- A multiline display can be done neatly as follows:

```
\begin{align*}
(x+y)^2
&= (x+y)(x+y) \\
&= x^2+2xy+y^2.
\end{align*}
```

$$\begin{aligned}(x+y)^2 &= (x+y)(x+y) \\ &= x^2 + 2xy + y^2.\end{aligned}$$

- You may ask me about this during class or by email.
- (11) When you've typed your answers in (where it says **Type answer here**), download the PDF and upload it to Blackboard. The Download button is next to the Log File button, which is next to the Recompile button. (The Log File button can be useful if your answer doesn't look like you expect—if you type `\subtetteq` by accident, for example, it will leave out the \subseteq in your PDF and inform you in the log that it doesn't know what “`\subtetteq`” means.)

