\LaTeX, A Short Course

Typsetting Source Code

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• Typesetting source code in \LaTeX{} is handled brilliantly by the listings package.

• Most basic usage is to paste the code inside of the \lstlisting environment.
\begin{lstlisting}
int main(void) {
    printf("Hello world!");
}
\end{lstlisting}

typesets as:

```
int main(void) {
    printf("Hello world!");
}
```

Wait... didn’t I say that it didn’t look awful??
For some unholy reason, the default appearance of listings is an abomination.

This can easily be fixed by setting some options.

Options can be set using the \lstset command.

Let’s change the base font, set a language:

```
\lstset{basicstyle=\tt, language=c}
```

now we get:

```c
int main(void) {
    printf("Hello\world!");
}
```
Let’s change the colour of keywords and comments, and add a shaded background:

```latex
\lstset{basicstyle=\tt, language=c, keywordstyle=\color{blue}\tt, commentstyle=\color{green}\tt, backgroundcolor=\color{lightgray}}
```

now we get:

```c
int main(void) {
    printf("Hello\world!");
}
```

Much better!
Try it out. Open the file `code.tex`. Add an `\lstset` command to make the code typeset like this:

```python
# Print something someone said.
def say_something(something, who):
    print who + 'said:' + something
```