Pandoc-rendered Markdown in LaTeX

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The `markdown.sty` package allows you to write [Markdown](#)-formatted text inside of LaTeX using the `markdown` environment and the `\markd` command. In fact, the text you're reading *right now* is [Pandoc](#)-rendered Markdown.[1]

The `markdown` environment is useful for blocks of Markdown-formatted text, such as the above paragraph. These blocks must be reasonably self-contained. For example, reference-style links (used above) must be defined within the same environment they are used.

Using the `\markd` command, you can include short snippets of Markdown *within* regular text. This paragraph contains several examples. A use of the `\markd` command cannot be split across multiple lines.[2]

Within the `markdown` environment, you can use all of the usual Markdown features plus Pandoc's [neat extensions](#). We've seen footnotes, links, and basic formatting already. Other useful features include in-line `code spans` and pre-formatted code blocks.

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

Also, itemized lists:

- Here's an item with a plain bullet.
    i. And a nested item with a Roman numeral bullet.
        a) And a nested–nested item with a different kind of bullet.

An especially relevant Pandoc extension is support for embedded LaTeX macros, including references (see Table 1) and $-delimited math: $e^{i\pi} = -1$.

For some Markdown features, the LaTeX code that Pandoc generates relies on external packages. These can be included in the usual way with `\usepackage`. The Pandoc documentation contains a [complete list](#) of the packages it assumes

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[1] That is, unless you're reading the source code, in which case it's not yet rendered. :-)

[2] Due to a limitation of the `xparse` package.

Feature	Dependencies
Images	`graphicx`
Links	`hyperref`, `url`
Strikethrough	`ulem`
Syntax highlighting	`listings` (requires `--listings`)
Tables	`booktabs`, `longtable`

Table 1: LATEX package dependencies of Markdown features.

are loaded, or you can also find them at the top of the source that generated this document. If your document doesn't use every feature of Pandoc, you can omit some of these packages. A few of the dependencies I know about are listed in Table 1. There are many others! Mostly this was just an excuse to show off tables and references in Markdown.

Both the `markdown` environment and the `\markd` command accept an optional argument containing additional arguments to pass to Pandoc. One use of this is to add syntax highlighting and character replacement to code blocks with Pandoc's `--listings` option, as illustrated in the following Haskell code.

```
plusOne :: Num a ⇒ [a] → [a]
plusOne = map (λa → a + 1)
```

Acknowledgments

Thank you to the StackExchange user G. Poore who solved all of the hard bits in his excellent answers to other users' questions. After having the idea, I immediately found his concise solution, which is the basis for this package. Later, another answer of his helped me figure out how to add optional arguments to a verbatim environment.