

# Pandoc Filter to Insert Arbitrary Complex Tables

Outputs: Web Page<sup>1</sup> / LaTeX<sup>2</sup> / PDF<sup>3</sup> / Overleaf<sup>4</sup>

## Dependencies

Make sure you have Pandoc and pandoc-crossref<sup>5</sup> installed (callable from cmd).

## Usage

Write your complex tables in HTML in `tables.html` and in LaTeX in `tables.tex`. <https://tablesgenerator.com> is a good resource for constructing complex tables. To insert tables into the output HTML/LaTeX document, use the syntax `<COMMENT> tbl:table-id <COMMENT>` to mark the beginning and `<COMMENT> END <COMMENT>` to mark the end of a table definition in `tables.html` and `tables.tex`. `<COMMENT>` corresponds to `%` in LaTeX and `<!--` and `-->` in HTML. `tbl:table-id` is the identifier of the table used for cross-referencing in the markdown source. Refer to pandoc-crossref<sup>6</sup> for details of cross referencing tables.

To compile the documents, apply the filter `custom-table.py` **AFTER** `pandoc--crossref` in the command line.

```
pandoc -F pandoc-crossref --lua-filter insertTables.lua README.md -o README.tex
pandoc -F pandoc-crossref --lua-filter insertTables.lua README.md -o README.html
```

## Example

See Table 1.

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<sup>1</sup><https://yongfu.name/pandoc-filter/>

<sup>2</sup><https://yongfu.name/pandoc-filter/README.tex>

<sup>3</sup><https://yongfu.name/pandoc-filter/README.pdf>

<sup>4</sup>[https://www.overleaf.com/docs?snip\\_uri=https://yongfu.name/pandoc-filter/README.tex&engine=xelatex](https://www.overleaf.com/docs?snip_uri=https://yongfu.name/pandoc-filter/README.tex&engine=xelatex)

<sup>5</sup><https://github.com/lierdakil/pandoc-crossref>

<sup>6</sup><https://github.com/lierdakil/pandoc-crossref>

Table 1: This is a *complex table*, **written** in `tables.tex` and `tables.html`.

	Column Span			
Row Span	a	b	d	f
	c	d	e	g

Table 2: This is a normal table written in markdown, which will not be replaced.

Column A	Column B
A1	B1
A2	B2

### Custom Caption Positions

By default, `insertTables.lua` looks for the string `\begin{tabular}` and inserts the caption before it. In circumstances where `\begin{tabular}` or `\begin{tabularx}` are not present in the table's code, this filter will fail. To deal with these cases, you have to tell `insertTables.lua` where to insert the caption by placing the anchor `%caption%` in your table's code. This may also be useful when you want to place the caption **below** the table body. This can be achieved by placing the anchor `%caption%` **after** the `tabular` environment:

```
\begin{table}[!htb]
  \centering
  \begin{tabular}{lllll}
    \hline
    \textbf{} & \multicolumn{4}{l}{Column Span} \\ \hline
    \multirow{2}{*}{Row Span} & a & b & d & f \\
    & c & d & e & g \\ \hline
  \end{tabular}
  %caption%
\end{table}
```

which results in Table 3 (this could only be seen in `tex`<sup>7</sup> or `PDF`<sup>8</sup> output).

	Column Span			
Row Span	a	b	d	f
	c	d	e	g

Table 3: For LaTeX tables, you can define the position of the caption with the string `%caption%` in `tables.tex`.

<sup>7</sup><https://yongfu.name/pandoc-filter/README.tex>

<sup>8</sup><https://yongfu.name/pandoc-filter/README.pdf>