

Tables

L^AT_EX

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Creating a simple table in LATEX

```
\begin{center}  
\begin{tabular}{ c c c }  
  cell1 & cell2 & cell3 \\  
  cell4 & cell5 & cell6 \\  
  cell7 & cell8 & cell9  
\end{tabular}  
\end{center}
```

| | | |
|-------|-------|-------|
| cell1 | cell2 | cell3 |
| cell4 | cell5 | cell6 |
| cell7 | cell8 | cell9 |

Creating a simple table in LATEX

```
\begin{center}  
\begin{tabular}{|c|c|c|}  
  \hline  
  cell1 & cell2 & cell3 \\ \\  
  cell4 & cell5 & cell6 \\ \\  
  cell7 & cell8 & cell9  
  \hline  
\end{tabular}  
\end{center}
```

| | | |
|-------|-------|-------|
| cell1 | cell2 | cell3 |
| cell4 | cell5 | cell6 |
| cell7 | cell8 | cell9 |

Creating a simple table in LATEX

```
\begin{center}
\begin{tabular} { | | c c c c | | }
  \hline
  Col1 & Col2 & Col2 & Col3 \\ \ [0.5ex]
  \hline\hline
  1 & 6 & 87837 & 787 \\ \
  \hline
  2 & 7 & 78 & 5415 \\ \
  \hline
  3 & 545 & 778 & 7507 \\ \
  \hline
  4 & 545 & 18744 & 7560 \\ \
  \hline
  5 & 88 & 788 & 6344 \\ \ [1ex]
  \hline
\end{tabular}
\end{center}
```

| Col1 | Col2 | Col2 | Col3 |
|------|------|-------|------|
| 1 | 6 | 87837 | 787 |
| 2 | 7 | 78 | 5415 |
| 3 | 545 | 778 | 7507 |
| 4 | 545 | 18744 | 7560 |
| 5 | 88 | 788 | 6344 |

Tables with fixed length

```
\usepackage{array}
```

```
\begin{center}
\begin{tabular} { | m{5em} | m{1cm} | m{1cm} | }
  \hline
  cell1 dummy text dummy text dummy text & cell2 & cell3 \\
  \hline
  cell1 dummy text dummy text dummy text & cell5 & cell6 \\
  \hline
  cell7 & cell8 & cell9 \\
  \hline
\end{tabular}
\end{center}
```

m : middle
p : top
b : bottom

| | | |
|--|-------|-------|
| cell1 dummy text dummy text dummy text | cell2 | cell3 |
| cell1 dummy text dummy text dummy text | cell5 | cell6 |
| cell7 | cell8 | cell9 |

Tables with fixed length

```
\begin{tabu} to 0.8\textwidth { | X[l] | X[c] | X[r] | }  
  \hline  
  item 11 & item 12 & item 13 \\  
  \hline  
  item 21 & item 22 & item 23 \\  
  \hline  
\end{tabu}
```

| | | |
|---------|---------|---------|
| item 11 | item 12 | item 13 |
| item 21 | item 22 | item 23 |

Combining columns

```
\begin{tabular}{|p{3cm}| |p{3cm}| p{3cm}| p{3cm}| }
\hline
\multicolumn{4}{|c|}{Country List} \\
\hline
Country Name or Area Name & ISO2 & ISO3 & ISO N \\
\hline
Afghanistan & AF & AFG & 004 \\
Aland Islands & AX & ALA & 248 \\
Albania & AL & ALB & 008 \\
Algeria & DZ & DZA & 012 \\
American Samoa & AS & ASM & 016 \\
Andorra & AD & AND & 020 \\
Angola & AO & AGO & 024 \\
\hline
\end{tabular}
```

| Country List | | | |
|---------------------------|------|------|-------|
| Country Name or Area Name | ISO2 | ISO3 | ISO N |
| Afghanistan | AF | AFG | 004 |
| Aland Islands | AX | ALA | 248 |
| Albania | AL | ALB | 008 |
| Algeria | DZ | DZA | 012 |
| American Samoa | AS | ASM | 016 |
| Andorra | AD | AND | 020 |
| Angola | AO | AGO | 024 |

Combining rows

```
\begin{center}
\begin{tabular}{|c|c|c|c|}
\hline
col1 & col2 & col3 & \\
\hline
\multirow{3}{4em}{Multiple row} & cell2 & cell3 & \\
& cell5 & cell6 & \\
& cell8 & cell9 & \\
\hline
\end{tabular}
\end{center}
```

| col1 | col2 | col3 |
|-----------------|-------|-------|
| Multiple row | cell2 | cell3 |
| | cell5 | cell6 |
| | cell8 | cell9 |

Multi-page tables

```

\hline
\multicolumn{2}{| c |}{End of Table}\
\hline
\hline
\endlastfoot

```

```

Lots of lines & like this\
Lots of lines & like this\
Lots of lines & like this\
Lots of lines & like this\
Lots of lines & like this\
Lots of lines & like this\
Lots of lines & like this\
Lots of lines & like this\
Lots of lines & like this\
...
Lots of lines & like this\
\end{longtable}

```

Table 1: Long table caption.

| Begin of Table | | | |
|----------------|-------------------------|----------------|-----------|
| Something | something else | | |
| Lots of lines | like this | | |
| Lots of lines | like this | | |
| Lots of lin | Continuation of Table 1 | | |
| Lots of lin | Something | something else | |
| Lots of lin | Lots of lines | like this | |
| Lots of lin | Lots of lines | like this | |
| Lots of lin | Lots of lines | Lots of lines | like this |
| Lots of lin | Lots of lines | Lots of lines | like this |
| Lots of lin | Lots of lines | Lots of lines | like this |
| Lots of lin | Lots of lines | Lots of lines | like this |
| Lots of lin | Lots of lines | Lots of lines | like this |
| Lots of lin | Lots of lines | Lots of lines | like this |
| Lots of lin | Lots of lines | Lots of lines | like this |
| End of Table | | | |

Positioning tables

```
\begin{table}[h!]
\centering
\begin{tabular}{||c c c c||}
\hline
Col1 & Col2 & Col2 & Col3 \\\ [0.5ex]
\hline
\hline
\hline
1 & 6 & 87837 & 787 \\\
2 & 7 & 78 & 5415 \\\
3 & 545 & 778 & 7507 \\\
4 & 545 & 18744 & 7560 \\\
5 & 88 & 788 & 6344 \\\ [1ex]
\hline
\end{tabular}
\end{table}
```

\[1ex]
Adds extra space to the cell

h : place the table *here* approximately

t : Position the table at the *top* of the page

b : Position the table at the *bottom* of the page

p : Put the table in a special page

! : Override internal LATEX parameters

H : Place the table at this precise location (like h!)

| Col1 | Col2 | Col2 | Col3 |
|------|------|-------|------|
| 1 | 6 | 87837 | 787 |
| 2 | 7 | 78 | 5415 |
| 3 | 545 | 778 | 7507 |
| 4 | 545 | 18744 | 7560 |
| 5 | 88 | 788 | 6344 |

Captions, labels and references

The table `\ref{table:1}` is an example of referenced `\LaTeX` elements.

```
\begin{table}[h!]  
\centering  
\begin{tabular}{|c|c|c|c|}  
  \hline  
  Col1 & Col2 & Col2 & Col3 \\ \ [0.5ex]  
  \hline  
  \hline  
  1 & 6 & 87837 & 787 \\ \\  
  2 & 7 & 78 & 5415 \\ \\  
  3 & 545 & 778 & 7507 \\ \\  
  4 & 545 & 18744 & 7560 \\ \\  
  5 & 88 & 788 & 6344 \\ \ [1ex]  
  \hline  
\end{tabular}  
\caption{Table to test captions and labels}  
\label{table:1}  
\end{table}
```

The table 1 is an example of referenced `\LaTeX` elements.

| Col1 | Col2 | Col2 | Col3 |
|------|------|-------|------|
| 1 | 6 | 87837 | 787 |
| 2 | 7 | 78 | 5415 |
| 3 | 545 | 778 | 7507 |
| 4 | 545 | 18744 | 7560 |
| 5 | 88 | 788 | 6344 |

Table 1: Table to test captions and labels

List of tables

```
\documentclass{article}
\usepackage[utf8]{inputenc}
\begin{document}
  \listoftables
  ...
\end{document}
```

List of Tables

| | | |
|---|--|---|
| 1 | Table to test captions and labels | 4 |
| 2 | Table to test wrapping text around a table | 4 |

Line width and cell padding

```
\documentclass{article}
\setlength{\arrayrulewidth}{1mm}
\setlength{\tabcolsep}{18pt}
\renewcommand{\arraystretch}{1.5}
\begin{document}
\begin{tabular}{|p{3cm}|p{3cm}|p{3cm}|}
\hline
\multicolumn{3}{|c|}{Country List} \\
\hline
Country Name or Area Name & ISO2 & ISO3 \\
\hline
Afghanistan & AF & AFG \\
Aland Islands & AX & ALA \\
American Samoa & AS & ASM \\
Andorra & AD & AND \\
Angola & AO & AGO \\
\hline
\end{tabular}
\end{document}
```

| Country List | | |
|---------------------------|------|------|
| Country Name or Area Name | ISO2 | ISO3 |
| Afghanistan | AF | AFG |
| Aland Islands | AX | ALA |
| American Samoa | AS | ASM |
| Andorra | AD | AND |
| Angola | AO | AGO |

Coloring alternating rows

```
\usepackage[table]{xcolor}
```

```
{ \rowcolors{3}{green!80!yellow!50}{green!70!yellow!40}  
\begin{tabular}{|p{3cm}|p{3cm}|p{3cm}|}  
  \hline  
  \multicolumn{3}{|c|}{Country List} \\ \hline  
  Country Name or Area Name & ISO2 & ISO3 \\ \hline  
  Afghanistan & AF & AFG \\ \hline  
  Aland Islands & AX & ALA \\ \hline  
  American Samoa & AS & ASM \\ \hline  
  Andorra & AD & AND \\ \hline  
  Angola & AO & AGO \\ \hline  
\end{tabular}  
}
```

| Country List | | |
|---------------------------|------|------|
| Country Name or Area Name | ISO2 | ISO3 |
| Afghanistan | AF | AFG |
| Aland Islands | AX | ALA |
| American Samoa | AS | ASM |
| Andorra | AD | AND |
| Angola | AO | AGO |

Coloring a table (cells, rows, columns and lines)

| Country List | | |
|---------------------------|------|------|
| Country Name or Area Name | ISO2 | ISO3 |
| Afghanistan | AF | AFG |
| Aland Islands | AX | ALA |
| American Samoa | AS | ASM |
| Andorra | AD | AND |
| Angola | AO | AGO |



Coloring a table (cells, rows, columns and lines)

```
\documentclass{article}
\usepackage[table]{xcolor}
\setlength{\arrayrulewidth}{1mm}
\setlength{\tabcolsep}{18pt}
\renewcommand{\arraystretch}{2.5}
\newcolumntype{s}{>\columncolor[HTML]{AAACED} p{3cm}}
\arrayrulecolor[HTML]{DB5800}
\begin{tabular}{|s|p{3cm}|p{3cm}|}
  \hline
  \rowcolor{lightgray} \multicolumn{3}{|c|}{Country List} \\
  \hline
  Country Name or Area Name & ISO2 & ISO3 \\
  \hline
  Afghanistan & AF & AFG \\
  \rowcolor{gray} Aland Islands & AX & ALA \\
  American Samoa & AS & ASM \\
  Andorra & AD & \cellcolor[HTML]{AA0044} AND \\
  Angola & AO & AGO \\
  \hline
\end{tabular}
```

| Country List | | |
|---------------------------|------|------|
| Country Name or Area Name | ISO2 | ISO3 |
| Afghanistan | AF | AFG |
| Aland Islands | AX | ALA |
| American Samoa | AS | ASM |
| Andorra | AD | AND |
| Angola | AO | AGO |

The END

Thank you!

