Class – more tables and ...

Put here your name

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1 Tables

1.1 More `tabular` options

More columns and rows formatting arguments.

p{wth} The text is set into lines of width *wth* and the top line is aligned with the other columns. It means that the text is set in a parbox with the command `\parbox[t]{wth}{text}`.

John	and	Mary
Paul	and	Joan

```
\begin{tabular}{|p{2cm}|c|c|}
\hline
John&and&Mary\\\hline
Paul&and&Joan\\\hline
\end{tabular}
```

\cline{n-m} This command draws a horizontal line from the left side of column n to the right side of column m. Like `\hline` may only be given just after the row termination `\\` and there may be more then one after another. The command `\cline{1-3} \cline{5-7}` draws two horizontal lines from column 1 to 3 and from column 5 to 7 below the row that was just ended.

A	B	C	d	e
a	b	c	D	E
$a-b$	$2b+c_1$	c_1-a_1	G	H
a_1	b_1	c	U	J

```
\begin{tabular}{|r|c|l|cc|}
\hline
A&B&C&d&e\\
\hline
a&b&c&D&E\\\cline{1-3}
%\hline
$a-b$&$2b+c_1$&$c_1-a_1$&G&H\\
\hline
$a_1$&$b_1$&$c$&U&J\\
\hline
\end{tabular}
```

multicolumn The syntax is: `\multicolumn{num}{col}{text}`. See the examples.

10–11		12	13	14
10	11	12	13	14

10	11	12	13	14
10	11	**12–14**		

```
\begin{tabular}{|l|l|lll|}
\hline
\multicolumn{2}{|c|}{10--11}&12&13&14\\\hline
10&11&12&13&14\\\hline
\end{tabular}
```

```
\begin{tabular}{|l|l|lll|}
\hline
10&11&12&13&14
\\\hline
10&11&\multicolumn{3}{|c|}{12--14}\\\hline
\end{tabular}
```

vline This command draws a vertical line with the height of the row at the location where it appears.

A	B	C	d	e
a	b	c	D	E
a_1	b_1	c	U	J

```
\begin{tabular}{|rclcc|}
\hline
A & B \vline & C & d &e\\
\hline
a & b & c & D \vline & E\\
\hline
$a_1$ \vline & $b_1$ & c &U&J\\
\hline
\end{tabular}
```

1.2 Package `multirow`

1. In your preamble write `\usepackage{lineno,multirow}`
2. Command `\multirow` sets a piece of text in a tabular or similar environment, spanning multiple rows. We will call the block of rows and columns that the text spans the multirow block. Usually this covers one column, but by combining it with `\multicolumn` more columns can be covered.

The basic syntax is:

`\multirow[<vpos>]{<nrows>}[<bigstruts>]{<width>}[<vmove>]{<text>}`

where

vpos defines the vertical positioning of the text in the multirow block. The default is [c] which means the text will be vertically centered. Other options are [t] for top alignment and [b] for bottom alignment.

nrows is the number of rows to span. You should leave the other rows empty at this column, otherwise the stuff created by `\multirow` will over-write it. With a positive value of ¡nrows¿ the spanned columns are this row and (¡nrows¿-1) rows below it. With a negative value of ¡nrows¿ they are this row and (1-¡nrows¿) above it. Fractional values are permitted for ¡nrows¿; this allows for some fine-tuning.

bigstruts is mainly used if you've used the `bigstrut` package. The default is 0.

width is the width to which the text is to be set. Special values are $*$ to indicate that the text parameter's natural width is to be used, and = to indicate that the specified width of the column in which the `\multirow` entry is set should be used.

vmove is a length used for fine-tuning: the text will be raised (or lowered, if ¡vmove¿ is negative) by that length above (below) wherever it would otherwise have gone.

text is the actual text of the construct. If the width was given as $*$ the text will be set in LR mode

text1		text2	
ch1		ch1	
ch2		ch2	
ch2	text1	ch2	text2
ch2		ch2	
ch2		ch2	

Table 1: First table

```
\begin{table}[h!]
\begin{center}
\begin{tabular}{|c|c|c|c|}

\hline
\multicolumn{2}{|c|}{text1}
&\multicolumn{2}{|c|}{text2}\\ \hline

\multicolumn{1}{|c|}{ch1}
&\multicolumn{1}{|c|}{\multirow{5}{*}{text1}}

&\multicolumn{1}{|c|}{ch1}
&\multicolumn{1}{|c|}{\multirow{5}{*}{text2}}\\\cline{1-1}\cline{3-3}

\multicolumn{1}{|c|}{ch2}&&
```

```
\multicolumn{1}{|c|}{ch2}&\\ \cline{1-1} \cline{3-3}

\multicolumn{1}{|c|}{ch2}&&
\multicolumn{1}{|c|}{ch2}&\\ \cline{1-1} \cline{3-3}

\multicolumn{1}{|c|}{ch2}&&
\multicolumn{1}{|c|}{ch2}&\\ \cline{1-1} \cline{3-3}

\multicolumn{1}{|c|}{ch2}&&
\multicolumn{1}{|c|}{ch2}&\\ \cline{1-1} \cline{3-3} \hline

\end{tabular}
\end{center}
\caption{First table}
\end{table}
```

2 Table of contents, lists of figures etc.

Some useful informations.

1. To create table of contents of our document we use command `\tableofcontents`. We put this command at the place where we want to have table of contents. Usual it is the beginning or the end of document. To have this table printed it is necessary to latex document twice.

   Remember! If there is no chapters, sections etc. the table of contents will be empty.

2. To create abstract of the document's content we have to put its text into environment

   ```
   \begin{abstract}
   ... text ...
   \end{abstract}
   ```

3. List of figures create command `\listoffigures`. Figures list will appear at the place where we put that command.
   Remember! To produce list of figures we have to put our pictures into environment

   ```
   \begin{figure}[h!]
   \includegraphics{figure.jpg}
   \caption{Text 1}
   \end{figure}
   ```

4. To produce list of tables we have to put our pictures into environment

   ```
   \begin{table}[h!]
    \begin{tabular}{|c|c|c|c|}
    ..........\\
    ...........\\
   ```

```
 \end{tabular}
\caption{Text  2}
\end{table}
```

3 Presentations with beamer class

To prepare presentation we use beamer class. How to do that – look at the file mypresentation.tex.

You can see also sample presentation sample-beamer.pdf. More information you can find in the manual.

List of Tables

Contents