1 Introduction

The rulerbox package* 
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rulerbox is an independent \LaTeX{} package providing macro \texttt{rulerbox}, which draws rulers along edges of an object, in the following style:

This might be useful when showing the absolute size of something in electronic documents, or designating the relative scale in printed materials.

2 Usage

\texttt{rulerbox}\{⟨content⟩\} somewhat resembles the macro \texttt{fbox}\{⟨content⟩\} defined by \LaTeX{}. The one mandatory parameter that they receive is the content to be wrapped inside a box. Then \texttt{rulerbox} decorates the box edges with rulers, whereas \texttt{fbox} frames the box by solid lines. Neither of them affects the vertical alignment.

\texttt{rulerbox}[⟨edges⟩]\{⟨content⟩\} also accepts an optional parameter, telling \LaTeX{} which edges to be decorated with rulers. ⟨edges⟩ is any subset of \texttt{t}, \texttt{b}, \texttt{l}, and \texttt{r}, controlling the top, bottom, left, and right edges respectively. So \texttt{rulerbox[tblr]}\{⟨content⟩\} behaves identically the same as

\begin{itemize}
    \item \texttt{rulerbox[⟨edges⟩]}\{⟨content⟩\}
\end{itemize}

2.1 Edge selection

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(unless default switches are turned off, see below), while \rulerbox\{(content)\} regresses to \hbox\{(content)\}.

Default status of each edge can be set separately and globally by switching \ifrulertop, \ifrulerbottom, \ifrulerleft, and \ifrulerright. For example, \rulerleftfalse suppresses all left rulers (except required explicitly by \{edges\}), until a \rulerlefttrue is seen.

### 2.2 Dimensions

Four dimensions are involved in the \rulerbox package. They can be redefined locally by \langle dimen name\rangle=\langle dimen express\rangle in \TeX{} style, or globally by \setlength{\langle dimen name\rangle}{\langle dimen express\rangle} in \LaTeX{} style.

- **\rulerunit:** The least count of rulers, i.e. distance between adjacent ticks in rulers. Default is 1mm, one millimetre, which produces rulers of metric length system. \rulerunit may be redefined to adapt to other decimal length systems, or draw rulers of relative scales. For example, if one wants to switch to Chinese length units, he may define \rulerunit=1cm\divide\rulerunit3\relax, which makes the least count 10/3 mm, namely one fen (分), or one tenth cun (寸).

- **\rulersep:** Distance between box edges and rulers. Default is 3pt.
- **\rulerwidth:** Length of longest ticks in rulers. Default is 7pt.
- **\rtickrule:** Width of tick lines in rulers. Default is 0.4pt.