The showexpl package*

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1 Introduction

The documentation of a LATEX package is by far more readable if there are examples of the commands' and environments' usage. The best way to do that is to give a comparison of the LATEX code and the formatted output. showexpl is a package for doing that comparison, it is based on the package listings which provides a good typesetted source code with emphasised keywords and so on.

2 Usage

You can use showexpl like every other package by putting the line

\usepackage{showexpl}

in your source code. showexpl doesn't know any options by itself, but all options for the underlying packages (listings and graphicx) will be passed to the respective packages.

showexpl provides one command and one environment:

- \LTXinputExample and
- LTXexample

\LTXinputExample

The syntax of \LTXinputExample is given by

 $\texttt{\LTXinputExample[$\langle key\ val\ list\rangle$] \{$\langle file\rangle$}$

LTXexample

The syntax of the environment LTXexample is given by

 $\verb|\begin{LTXexample}| [\langle key\ val\ list \rangle] ... \verb|\end{LTXexample}|$

The set of options represented by $\langle key \ val \ list \rangle$ is the same for both the command and the environment, the options are described in the following:

attachfile Boolean valued key, default value: false. If set to true the sourcecode will be attached to the .pdf file—presumed that the document is processed by pdflatex.

codefile Name of the (temporary) file that contains the code which will be formatted as source code. The default value is \jobname.tmp.

^{*}This document corresponds to showexpl v0.3s, dated 2021/01/06.

- **exploreset** A $\langle key\ val\ list \rangle$ which serves for presetting the properties of the formatting of the source code, for values see the documentation of the listings package. The default value is
- **graphic** Name of a (graphic) file. This file—if present—will be included and displayed instead of the formatted code. The default value is empty.
- hsep Defines the horizontal distance between the source code and the formatted text.
- **justification** Defines the justification of the formatted text: reasonable values are \raggedleft, \raggedright, \centering. The default value is \raggedright.
- **overhang** A *dimen*-value that defines the amount by which the formatted text and the source code can overlap the print space. The default value is 0 pt.
- pos: Defines the relative position of the formatted text relating to the source code. Allowed values are t, b, 1, r, o, and i for top, bottom, left, right, outer, and inner. The last values give sense only for two-sided printing, where there are outer and inner margins of a page. The default value is 1.
- **preset** Any TEX code executed before the sample code but not visible in the listings area.
- rangeaccept Boolean valued key, default value is false. If set to true, one can define ranges of lines that will be excerpted from the source code.
- **rframe** Defines the form of the frame around the formatted text. With a nonempty value (e.g. "single") a simple frame will be drawn. In the future more kinds of frames will be supported. The default value is empty (no frame).
- varwidth Boolean valued key, default value is false. If set to true, the formatted text is set with its "natural" width instead of a fixed width as given by the value of the option width.
- vsep Defines the vertical distance between the source code and the formatted text.
- wide Boolean valued key, default value is false. If set to true, the source code and the formatted text overlap the print space and the margin area.
- width A $\langle dimen \rangle$ value that defines the width of the formatted text. The default value depends of the relative positions of the source code and the formatted text.
- scaled Without a value the formatted text will be scaled to fit the given width of the result area. With a number as value the formatted text will be scaled by this number.

In addition to these options the kind of the result box (default: \fbox) can be changed. For example:

\renewcommand\ResultBox{\fcolorbox{green}{lightgray}}
\setlength\ResultBoxSep{5mm}% default: \fboxsep
\setlength\ResultBoxRule{2mm}% default: \fboxrule

3 Implementation

```
1 \DeclareOption{final}{%
                   \PassOptionsToPackage{\CurrentOption}{graphicx}%
                   \PassOptionsToPackage{\CurrentOption}{listings}%
                4 }%
                5 \DeclareOption{draft}{%
                   \PassOptionsToPackage{\CurrentOption}{graphicx}%
                   \PassOptionsToPackage{\CurrentOption}{listings}%
                8 }%
                9 \DeclareOption{attachfiles}{%
                  \AtBeginDocument{\IfFileExists{attachfile.sty}%
                      {\RequirePackage{attachfile}}{\def\SX@attachfile{}}}
               11
               12 }%
               13 \DeclareOption*{\PassOptionsToPackage{\CurrentOption}{listings}}
               14 \ProcessOptions\relax
               15 \RequirePackage{refcount, listings, graphicx, varwidth, float}
               We must aktivate code from package listings for writing files.
               16 \lst@RequireAspects{writefile}
               Parameter #2 is a length or a number. Parameter #1 is a macro. After a call of
\SX@defaultWD
               \SX@defaultWD this macro contains the value of the length or the value of the
               number multiplied by \linewidth.
               17 \newcommand*\SX@defaultWD[2]{%
               18 \afterassignment\SX@def@WD\dimen@#2\linewidth\relax{#1}}
               19 \newcommand*\SX@def@WD{}
               20 \def\SX@def@WD#1\relax#2{\edef#2{\the\dimen@}}
               Additional keys.
               21 \lst@Key{pos}\relax{\def\SX@pos{#1}}
               22 \lst@Key{width}\relax{\def\SX@width{#1}}
               23 \lst@Key{hsep}\relax{\@tempdima=#1\relax\edef\SX@hsep{\the\@tempdima}}
               24 \lst@Key{vsep}\relax{\@tempdima=#1\relax\edef\SX@vsep{\the\@tempdima}}
               25 \lst@Key{overhang}\relax{\def\SX@overhang{#1}}
               26 \lst@Key{wide}f[t]{\lstKV@SetIf{#1}\if@SX@wide}
               27 \lst@Key{rframe}\relax{\def\SX@rframe{#1}}
               28 \lst@Key{preset}\relax{\def\SX@preset{#1}}
               29 \newcommand*\SX@scaled{}
               30 \lower = 30 \end{41}
               31 \lst@Key{explpreset}\relax{\def\SX@explpreset{#1}}
               32 \lst@Key{codefile}\relax{\def\SX@codefile{#1}}
               33 \newif\if@SX@rangeaccept \@SX@rangeacceptfalse
               34 \newif\if@SX@varwidth \@SX@varwidthfalse
               35 \newif\if@SX@wide \@SX@widefalse
               36 \newif\if@SX@attachfile \@SX@attachfilefalse
               37 \lst@Key{rangeaccept}f[t]{\lstKV@SetIf{#1}\if@SX@rangeaccept}
               38 \lst@Key{varwidth}f[t]{\lstKV@SetIf{#1}\if@SX@varwidth}
               39 \lst@Key{justification}\relax{\def\SX@justification{#1}}
               40 \t \ensuremath{\texttt{MSKV@SetIf}{\#1}} if \ensuremath{\texttt{QSX@attachfile}} \\
               41 \newcommand*\SX@graphicname{}%
               42 \newcommand*\SX@graphicparam{}%
```

```
43 \text{ st@Key{graphic}{}[]{%}
                \lstKV@OptArg[width=\linewidth]{#1}{%
                   \edef\SX@graphicparam{##1}\edef\SX@graphicname{##2}%
            45
            46
                }%
            47 }%
            48 \newbox\SX@ResBox
            49 \mbox{let\ResultBox=\fbox} \
            50 \newdimen\ResultBoxSep \ResultBoxSep=\fboxsep
            51 \newdimen\ResultBoxRule \ResultBoxRule=\fboxrule
            52 \newcommand*\SX@pos{}
            53 \newcommand*\SX@width{}
            54 \newcommand*\SX@hsep{}
            55 \newcommand*\SX@vsep{}
            56 \newcommand*\SX@overhang{}
             57 \newcommand*\SX@rframe{}
             58 \newcommand\SX@preset{}
             59 \newcommand*\SX@explpreset{}
            60 \newcommand*\SX@@explpreset{}
            61 \newcommand*\SX@codefile{}\edef\SX@codefile{\jobname.tmp}
            62 \newcommand*\SX@justification{\raggedright}
            Contains some redefinitions of LATEX macros and environments to do nothing.
\SX@@preset
             \$X@@preset will be called just before typesetting the result of the example code.
            More can be added with the user key "preset=...".
            63 \newcommand*\SX@@preset{%
            64 \renewcommand\documentclass[2][]{\SX@eat@version}%
                \renewcommand\usepackage[2][]{\SX@eat@version}%
            65
                \renewenvironment{document}{}{}%
               \renewcommand\cite[1][]{}%
                \let\tableofcontens\relax \let\listoffigures\relax
                \let\listoftables\relax \let\printindex\relax
            70
                \let\listfiles\relax \let\nofiles\relax
            71
                \let\index\@gobble
                \expandafter\ifx\csname ver@cleveref.sty\endcsname\relax
            72
            73
                   \let\refstepcounter=\stepcounter
                   \let\label\@gobble
            74
                \else
            75
            76
                  \let\cref@old@refstepcounter=\stepcounter
             77
                   \let\cref@old@label=\@gobble
             78
            79
                 \let\bibliography\@gobble
                80
                 %%\let\immediate\relax \let\write\@gobbletwo
            81
                %%\let\closeout\@gobble \let\@@input\@gobble
            82
                \renewcommand\marginpar[2][]{}%
            83
                \renewcommand\footnote[2][]{}%
            84
                \let\@footnotetext\@gobble
            85
            86
                %%\abovedisplayskip=\z@
            87
                %%\abovedisplayshortskip=\z@
            88 }
            89 \newcommand*\SX@eat@version[1][]{}
 \isSX@odd Parameter #1 is executed on odd pages, parameter #2 on even pages.
```

```
90 \newif\ifSX@wasodd
                      91 \if@twoside
                           \newcommand*\isSX@odd{%
                      92
                              \begingroup
                      93
                                \ifodd\getpagerefnumber{\SX@IDENT}%
                      94
                                  \aftergroup\SX@wasoddtrue
                      95
                      96
                      97
                                  \aftergroup\SX@wasoddfalse
                      98
                                \fi
                      99
                             \endgroup
                             \ifSX@wasodd
                      100
                                \expandafter\@firstoftwo
                      101
                      102
                                \expandafter\@secondoftwo
                      103
                      104
                              \fi
                      105
                      106 \else
                      107
                           \SX@wasoddtrue
                           \newcommand*\isSX@odd[2]{#1}
                      108
                      109 \fi
                      The call of \isSX@odd sets also \ifSX@wasodd to true or false. If it's clear that
                      no page break occurs, \ifSX@wasodd can be used.
                      110 \newcounter{ltxexample}
                      111 \newcommand*{\SX@IDENT}{SX@\number\value{ltxexample}}
     \SX@attachfile
                      112 \newcommand*\SX@attachfile{%
                      113 \if@SX@attachfile
                             \attachfile[mimetype=text/plain,subject={example \theltxexample}]%
                      114
                                {\SX@codefile}{}%
                      115
                           \fi
                      116
                      117 }
                      Six macros for positioning #2 (result) and #3 (code). The result can be above,
\SX@put@t/b/l/r/o/i
                      \underline{b}elow, \underline{l}eft or \underline{r}ight of the code area or on the \underline{o}uter or \underline{l}nner side. Parameter #1 is
                      the width of the result.
                      118 \newcommand*\SX@put@t[3]{%
                           \SX@ResultArea{\linewidth}{#2}\endgraf\pagebreak[2]%
                      120
                           \@tempdima=\dimexpr\SX@vsep\vskip\@tempdima
                      121
                           \SX@CodeArea{\linewidth}{#3}%
                      122 }
                      123 \newcommand*\SX@put@b[3]{%
                           \SX@CodeArea{\linewidth}{#3}\endgraf\pagebreak[2]%
                           \@tempdima=\dimexpr\SX@vsep\vskip\@tempdima
                      125
                      126
                           \SX@ResultArea{\linewidth}{#2}%
                      127 }
                      128 \newcommand*\SX@put@1[3]{%
                           \@tempdimc=\dimexpr\linewidth-#1-\SX@hsep %
                           \SX@ResultArea{#1}{#2}\hfill\SX@CodeArea{\@tempdimc}{#3}%
                      130
                      131 }
                      132 \newcommand*\SX@put@r[3]{%
                           \@tempdimc=\dimexpr\linewidth-#1-\SX@hsep %
                      133
                           \SX@CodeArea{\@tempdimc}{#3}\hfill\SX@ResultArea{#1}{#2}%
```

```
136 \newcommand*\SX@put@o[3]{%
                 137
            138 }
            139 \newcommand*\SX@put@i[3]{%
                 \label{lem:cond} $$\operatorname{SXQputQ\,ifSXQwasodd l\else r\fi}_{\#1}_{\#2}_{\#3}_{\%}$
            141 }
            142 \newcommand\SX@ResultArea[2]{%
                 \SX@justification\@tempdima=\dimexpr #1 %
            143
                 \parbox\@tempdima{#2}%
            144
            145 }
            146 \newcommand\SX@CodeArea[2]{%
                 \@tempdima=\dimexpr #1 %
            147
                 \label{lem:lemphoxa} $$\sum_{\alpha\in\mathbb{Z}}% $$\sum_{\alpha\in\mathbb{Z}} \mathbb{Z}_{\alpha}. $$
            148
                 \@tempdima=\dp\@tempboxa\usebox\@tempboxa
            149
                 \rlap{\raisebox{-\@tempdima}[Opt][Opt]{\SX@attachfile}}%
            150
            151 }
            152 \newcommand*\SX@KillAboveCaptionskip{%
            153
                 \ifx\lst@caption\@empty\else
            154
                    \lst@IfSubstring t\lst@captionpos
                      {\vskip-\abovecaptionskip}{}%
            155
                 \fi
            156
            157 }
            158 \newcommand*\SX@KillBelowCaptionskip{%
                 \ifx\lst@caption\@empty\else
            159
                    \lst@IfSubstring b\lst@captionpos
            160
                      {\vskip-\belowcaptionskip}{}%
            161
                 \fi
            162
            163 }
LTXexample
            164 \lstnewenvironment{LTXexample}[1][]{%
                 \@temptokena{#1}%
                 \begingroup
             For "codefile=..."/"graphic=..." if \theltxexample or \thelstlisting is part of
             the filename.
                 \advance\c@ltxexample\@ne \advance\c@lstlisting\@ne
            167
                 \expandafter\lstset\expandafter{\SX@explpreset,#1}%
            168
            169
                 \edef\x{\endgroup
                    \def\noexpand\SX@codefile{\SX@codefile}%
            170
                    \def\noexpand\SX@graphicname{\SX@graphicname}%
            171
            172
                    \def\noexpand\SX@graphicparam{\SX@graphicparam}}%
            173
                 \xdef\SX@@explpreset{\the\@temptokena,codefile=\SX@codefile,%
            174
                   graphic={[\SX@graphicparam]{\SX@graphicname}}}%
            175
                 \setbox\@tempboxa=\hbox\bgroup
            176
                 \lst@BeginWriteFile{\SX@codefile}%
            177
            178 }
            179 {%
            180
                 \lst@EndWriteFile\egroup
                 \SX@put@code@result
            181
            182 }
```

135 }

\SX@put@code@result

```
183 \newcommand*\SX@put@code@result{%
     \begingroup
184
        \expandafter\lstset\expandafter{\SX@explpreset}%
185
        \expandafter\lstset\expandafter{\SX@@explpreset}%
186
 Use listings floating procedure if necessary.
       \ifx\lst@float\relax\else
187
          \edef\@tempa{\noexpand\lst@beginfloat{lstlisting}[\lst@float]}
188
          \expandafter\@tempa
189
190
        \ifx\lst@caption\@empty
191
          \lstset{nolol=true}%
192
193
194
        \if@SX@wide\def\SX@overhang{\marginparwidth+\marginparsep}\fi
195
        \trivlist\item\relax
          \stepcounter{ltxexample}\label{\SX@IDENT}%
196
 Make \SX@width a real dimension if the unit is missing.
          \SX@defaultWD\SX@width{\SX@width}%
197
 Set the default width if necessary.
198
          \ifdim\SX@width<\z@
199
            \@tempswatrue
            \def\@tempa{t}%
200
201
            \ifx\@tempa\SX@pos\@tempswafalse\fi
202
            \def\@tempa{b}%
203
            \ifx\@tempa\SX@pos\@tempswafalse\fi
            \@tempdima=\dimexpr\linewidth+\SX@overhang %
204
            \if@tempswa\@tempdima=.5\@tempdima\fi%
205
            \edef\SX@width{\the\@tempdima}%
206
207
 Correct \SX@width if a frame is requested.
         \ifx\SX@rframe\@empty
208
            \label{longdef} $$ \prod_{m=\#1{\#1}}% $$
209
          \else
210
            \let\SX@frame\ResultBox
211
            \@tempdima=\dimexpr\SX@width-2\ResultBoxSep-2\ResultBoxRule %
212
213
            \edef\SX@width{\the\@tempdima}%
214
          \sin SX@odd{\def\@tempa{1}}{\def\@tempa{r}}%
215
216
          \makebox[\linewidth][\@tempa]{%
            \parbox{\dimexpr\linewidth+\SX@overhang}{%
217
 \SX@codefile (\jobname.tmp) is not nessesary for the filelist.
              \let\@addtofilelist\@gobble
218
219
              \let\lst@ifdisplaystyle=\iftrue
              \SX@KillAboveCaptionskip\lst@MakeCaption{t}%
220
 Use the "natural" width of the result code if "varwidth" is true. .
221
              \setbox\SX@ResBox\hbox{%
222
                \fboxsep=\ResultBoxSep
223
                \fboxrule=\ResultBoxRule
224
                \SX@frame{%
                  \@nameuse{\if@SX@varwidth varwidth\else minipage\fi}%
225
```

```
227
                               \begingroup
                                 \SX@resultInput
          228
                               \endgroup
          229
                             \Onameuse{end\if@SX@varwidth varwidth\else minipage\fi}}}%
          230
                        \edef\SX@width{\the\wd\SX@ResBox}%
          231
                        \@ifundefined{SX@put@\SX@pos}%
          232
                           {\@latex@error{Parameter '\SX@pos' undefined}\@ehd}%
          233
          234
                        {\@nameuse{SX@put@\SX@pos}%
                          {\SX@width}{\box\SX@ResBox}{\SX@codeInput}}\%
          235
                        \lst@MakeCaption{b}\SX@KillBelowCaptionskip
          236
                      }%
          237
                    }%
          238
          239
                  \endtrivlist
                  \ifx\lst@float\relax\else\expandafter\lst@endfloat\fi
          240
                  \gdef\SX@@explpreset{}%
          241
          242
                \endgroup
          243 }
          244 \newcommand\SX@SkipToFirst{\%
          245
                \ifeof\@inputcheck\else
                  \ifnum \lst@lineno=\lst@firstline\else
          246
                    \readline\@inputcheck to\SX@tempa
          247
                    \typeout{IGNORE (\the\lst@lineno)}%
          248
                    \global\advance\lst@lineno\@ne
          249
                    \SX@SkipToFirst
          250
          251
          252
                \fi
          253 }
          254 \newcommand\SX@ProcessResult{\%}
          255
                \ifeof\@inputcheck
                  \let\SX@tempb\relax
          256
                \else
          257
                  \let\SX@tempb\SX@ProcessResult
          258
                  \ifnum \lst@lineno>\lst@lastline\relax
          259
                    \ifx\lst@linerange\@empty
          260
          261
                      \let\SX@tempb\relax
          262
          263
                      \lst@GetLineInterval
          264
                      \SX@SkipToFirst
          265
                    \fi
          266
                  \else
                    \readline\@inputcheck to\SX@tempa
          267
                    \typeout{READ (\the\lst@lineno)}%
          268
                    \expandafter\g@addto@macro
          269
          270
                      \expandafter\SX@lines\expandafter{\SX@tempa^^J}%
                    \global\advance\lst@lineno\@ne
          271
                  \fi
          272
          273
                \fi
          274
                \SX@tempb
          275 }
\SX@input
          276 \newcommand\SX@input[1]{%
```

\SX@width\relax

226

```
\IfFileExists{#1}{}%
                278
                279
                        {%
                          \filename@parse{#1}%
                280
                          \ifx\filename@ext\relax \def\filename@ext{tex}\fi
                281
                          \@latexerr{File
                            '\filename@area\filename@base.\filename@ext' not found.^^J^^J}\@ehd%
                283
                284
                       }%
                        \openin\@inputcheck#1
                285
                        \lsthk@PreSet\let\lst@linerange\@empty\global\lst@lineno\@ne
                286
                        \expandafter\lstset\expandafter{\SX@@explpreset}%
                287
                        \ifx\lst@linerange\@empty
                288
                          \edef\lst@linerange{{\lst@firstline}-{\lst@lastline},}%
                289
                        \fi
                290
                        \lst@GetLineInterval
                291
                        \SX@Info
                292
                        \newlinechar='\^^J\relax
                293
                294
                        \SX@SkipToFirst\let\SX@lines\@empty
                295
                        \SX@ProcessResult
                296
                        \closein\@inputcheck
                        \scantokens\expandafter{\SX@lines}%
                297
                      \endgroup
                298
                299 }
                300 \newcommand*\SX@Info{%
                      \typeout{-----
                301
                      \typeout{pos=\SX@pos}%
                302
                303
                      \typeout{width=\SX@width}%
                304
                      \typeout{hsep=\SX@hsep}%
                305
                      \typeout{vsep=\SX@vsep}%
                      \typeout{overhang=\SX@overhang}%
                      \typeout{rframe=\SX@rframe}%
                307
                      \typeout{codefile=\SX@codefile}%
                308
                      \@ifundefined{lst@firstline}{}%
                309
                        {\typeout{\string\lst@firstline=\lst@firstline}}%
                310
                      \@ifundefined{lst@lastline}{}%
                311
                        {\typeout{\string\lst@lastline=\lst@lastline}}%
                312
                      \@ifundefined{lst@linerange}{}%
                313
                        {\typeout{\string\lst@linerange=\lst@linerange}}%
                314
                      \typeout{\string\if@SX@wide=\if@SX@wide TRUE\else FALSE\fi}%
                315
                      \typeout{\string\if@SX@rangeaccept=\if@SX@rangeaccept TRUE\else FALSE\fi}%
                      \typeout{\string\if@SX@varwidth=\if@SX@varwidth TRUE\else FALSE\fi}%
                317
                318
                      \typeout{graphicfile=\SX@graphicname, graphicparameter=[\SX@graphicparam]}%
                319
                      \typeout{-----}%
                320 }
                321 \verb|\providecommand*\MakePercentIgnore{\catcode'\%9\relax}|
                322 \providecommand*\MakePercentComment{\catcode'\%14\relax}
\SX@resultInput
                323 \newcommand*\SX@resultInput{%
                324
                     \ifx\SX@graphicname\@empty
                325
                        \begingroup
                          \MakePercentComment\makeatother\catcode'\^^M=5\relax
                326
                327
                          \SX@@preset\SX@preset
```

277

\begingroup

```
\if@SX@rangeaccept
328
          \let\SX@tempa=\SX@input
329
          \else
330
           \let\SX@tempa=\input
331
332
          \fi
          \if\SX@scaled ?%
333
            \let\SX@tempb=\@firstofone
334
335
          \else
            \if\SX@scaled !%
336
              \def\SX@tempb##1{\resizebox{\SX@width}{!}{##1}}%
337
338
            \else
              339
340
            \fi
          \fi
341
          \let\SX@lst@Init=\lst@Init
342
 Prevents float environments from floating. This is not enough for floating listing
environments! Why?
         \def\@xfloat##1[##2]{%
343
            \def\@captype{##1}%
344
            \ensuremath{\mbox{Qnamedef{the}\ensuremath{\mbox{Qcaptype}}{0}}\%}
345
            \@float@HH{##1}[H]}%
346
 Special handling of floating listing environments.
         \def\lst@Init{%
347
348
            \let\lst@float=\relax
349
            \setcounter\@captype{-1}%
            \SX@lst@Init
350
351
Typeset the Code.
         \SX@tempb{\SX@tempa{\SX@codefile}}\par
352
353
       \endgroup
354
     \else
       \expandafter\includegraphics\expandafter[\SX@graphicparam]%
355
          {\SX@graphicname}%
356
357
     \fi
358 }
359 \newcommand*\SX@codeInput{%
 Without a caption entry the command \lstinputlisting adds the filename to
 the "list of listings" (lol). This should be avoided.
     \begingroup
 The default parameters for all examples.
     \expandafter\lstset\expandafter{\SX@explpreset}%
If "numbers=none" then margin dimensions should be zero.
       \expandafter\lstset\expandafter{\SX@@explpreset}%
362
       \ifx\lst@PlaceNumber\@empty
363
          \verb|\g@addto@macro|SX@@explpreset{,xleftmargin=0pt,xrightmargin=0pt}||%
364
       \fi
365
       \SX@Info
366
367
       \expandafter\lstinputlisting\expandafter[\SX@@explpreset,nolol=true,%
```

\SX@codeInput

```
\verb|caption={}|, \verb|belowskip=\z0|, \verb|aboveskip=\z0|, \verb|float=false|| {\SX0| codefile}||, \verb|caption={}||, \verb|cap
368
369
                        \endgroup
370 }%
371 \newcommand*\LTXinputExample[2][]{%
                        \label{lem:codefile=#2} $$ \g@addto@macro\SX@@explpreset{float=false,\#1,codefile=\#2}\%$ $$
                         \SX@put@code@result}%
   All the default values.
374 \text{lstset}\{\text{explpreset=}\{\text{numbers=left,numberstyle=}\}\
   Negative width means defaults.
                       xleftmargin=1em,columns=flexible,language=[LaTeX]TEX},pos=1,width=-99pt,
                       overhang=Opt,hsep=\columnsep,vsep=\bigskipamount,rframe=single}
377 \AtBeginDocument{%
                        379 }
    Changing the defaults possible in showexpl.cfg.
380 \verb|\InputIfFileExists{showexpl.cfg}{}{}{}
```

Change History

v0.1a	the parts (RN) 6
General: "hpos" and "vpos"	v0.1j
added, "pos" removed (RN) 3	\SX@input: For ranges of lines
Initial version 1	(RN) 8
v0.1b	General: "rangeaccept" added
\SX@put@t/b/l/r/o/i: Positioning	(RN) 3
the captions more independend	v0.1k
of the result and code area	\SX@put@t/b/l/r/o/i: Change
(RN) 5	[a]bove to [t]op (RN) 5
v0.1c	General: Some bug corrections
\SX@put@t/b/1/r/o/i: Commands	(RN)
\SX@KillAboveCaptionskip	v0.11
and	General: "graphic" added (RN) 3
\SX@KillBelowCaptionskip added (RN) 5	v0.1m
v0.1f	General: Problem related to
General: "lstpreset" added. (RN). 3	$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $
v0.1h	General: "varwidth" and
General: "codefile" added. (RN) 3	"justification" added (RN) 3
"lstpreset" renamed to	"varwidth" package used (RN) 6
"exploreset" (RN) 3	v0.2b
New macro \LTXinputExample	General: Check if \SX@put@? is
(RN)	defined (RN) 6
Renamed from "example" to	v0.3a
"LTXexample' (RN) 6	\SX@attachfile: Attach file
v0.1i	functionality (with pdfTFX)
General: Better caption positioning	added (RN) 5
and correct distance between	General: "attachfile" added (RN). 3

v0.3b	v0.3l
\SX@resultInput: Input of result	\SX@resultInput: Code for
code now inside a group;	"scaled" option (RN) 9
\makeatother added (RN) 9	General: Option "scaled" and
v0.3c	\SX@scaled added (RN) 3
\SX@resultInput: Wrong catcode	v0.3m
for newline char corrected	\SX@put@code@result: Wrong
(RN) 9	assignement for
v0.3d	\lst@belowskip (RN) 7
\SX@resultInput: Missing \par	v0.3n
added (RN) 9	\SX@put@code@result: Use
v0.3e	\ResultBox 7
\SX@@preset: More redefinitions	General: Define \ResultBox etc 3
added (RN) 4	Prevent utf8 encoding errors 6
v0.3g	v0.3p
General: \SX@ProcessResult is	\SX@@preset: Remove extra
now working correctly using	treatment of 'figure'/'table'
\readline and \scantokens.	(RN) 4
Thanks to Ulrich Diez for help	\SX@put@code@result: Let's leave
(RN) 8	\lst@MakeCaption untouched
Missing \newcommand for	(RN) 7
\SX@@explpreset added (RN). 4	\SX@resultInput: Better handling
v0.3h	of floats (RN) 10
General: New Option 'attachfiles'	\isSX@odd: Replace \isodd with
(RN) 3	\ifodd\getpagerefnumber
v0.3j	(remove package 'ifthen') (RN). 4
\SX@put@code@result: Setting	General: Remove package 'calc'
$\$ \lst@MakeCaption to was a	(RN) 3
bad idea for hyperlinks. Group	v0.3q
added to varwidth	\SX@resultInput: Floats should
environment. (Suggestions by	always be numbered 0 (RN) 10
Ulrike Fischer.) 7	v0.3r
v0.3k	\SX@@preset: letting
\SX@put@code@result: Setting	\refstepcounter be
$\$ \lst@MakeCaption to \@gobble	\stepcounter (RN) 4
again (prevent multiply defined	v0.3s
labels; label key) 7	\SX@@preset: Special handling of
General: Definition for "hyperref"	cleveref's \refstepcounter
(suggested by Heiko Oberdiek) 11	(RN) 4

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