

The `showexpl` package*

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1 Introduction

The documentation of a L^AT_EX 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 L^AT_EX 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

```
\LTXinputExample[<key val list>]{<file>}
```

`LTXexample` The syntax of the environment `LTXexample` is given by

```
\begin{LTXexample}[<key val list>]... \end{LTXexample}
```

The set of options represented by `<key val list>` 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` v0.31, dated 2014/01/19.

explpreset 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 `0pt`.

pos: Defines the relative position of the formatted text relating to the source code. Allowed values are `t`, `b`, `l`, `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 non-empty 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`.

hsep 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.

3 Implementation

```
1 \DeclareOption{final}{%
2   \PassOptionsToPackage{\CurrentOption}{graphicx}%
3   \PassOptionsToPackage{\CurrentOption}{listings}%
4 }%
5 \DeclareOption{draft}{%
6   \PassOptionsToPackage{\CurrentOption}{graphicx}%
7   \PassOptionsToPackage{\CurrentOption}{listings}%
8 }%
9 \DeclareOption{attachfiles}{%
10  \AtBeginDocument{\IfFileExists{attachfile.sty}{%
11    \RequirePackage{attachfile}}{\def\SX@attachfile{}}}}
12 }%
13 \DeclareOption*{\PassOptionsToPackage{\CurrentOption}{listings}}
14 \ProcessOptions\relax
15 \RequirePackage{listings,calc,ifthen,graphicx,varwidth}
```

We must activate code from package `listings` for writing files.

\SX@defaultWD Parameter #2 is a length or a number. Parameter #1 is a macro. After a call of \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 \lst@Key{scaled}{?}{!}{\def\SX@scaled{#1}}}

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 \lst@Key{attachfile}f[t]{\lstKV@SetIf{#1}\if@SX@attachfile}
41 \newcommand*\SX@graphicname{}%
42 \newcommand*\SX@graphicparam{}%
```

```

43 \lst@Key{graphic}{}[]{%
44   \lstKV@OptArg[width=\linewidth]{#1}{%
45     \edef\SX@graphicparam{##1}\edef\SX@graphicname{##2}%
46   }%
47 }%
48 \newbox\SX@ResBox
49 \newcommand*\SX@pos{}%
50 \newcommand*\SX@width{}%
51 \newcommand*\SX@hsep{}%
52 \newcommand*\SX@vsep{}%
53 \newcommand*\SX@overhang{}%
54 \newcommand*\SX@rframe{}%
55 \newcommand\SX@preset{}%
56 \newcommand*\SX@explpreset{}%

57 \newcommand*\SX@explpreset{}%
58 \newcommand*\SX@codefile{}{\edef\SX@codefile{\jobname.tmp}%
59 \newcommand*\SX@justification{\raggedright}

\SX@@preset Contains some redefinitions of LATEX macros and environments to do nothing.
\SX@@preset will be called just before typesetting the result of the example code.
More can be added with the user key “preset=...”.
60 \newcommand*\SX@@preset{%
61   \renewcommand\documentclass[2][]{\SX@eat@version}%
62   \renewcommand\usepackage[2][]{\SX@eat@version}%
63   \renewenvironment{document}{}{}%
64   \renewenvironment{figure}[1][]{\def\@capttype{figure}}{}%
65   \renewenvironment{table}[1][]{\def\@capttype{table}}{}%
66   \renewcommand\cite[1]{}%
67   \let\tableofcontents\relax \let\listoffigures\relax
68   \let\listoftables\relax \let\printindex\relax
69   \let\listfiles\relax \let\nofiles\relax
70   \let\index@\gobble \let\label@\gobble
71   \let\bibliography@\gobble
72   \let\pagestyle@\gobble \let\thispagestyle@\gobble
73   %%\let\immediate\relax \let\write@\gobbletwo
74   %%\let\closeout@\gobble \let\@input@\gobble
75   \renewcommand\marginpar[2]{}%
76   \renewcommand\footnote[2]{}%
77   \let\footnotetext@\gobble
78   %%\abovedisplayskip=\z@
79   %%\abovedisplayshortskip=\z@
80 }%
81 \newcommand*\SX@eat@version[1]{}}

\isSX@odd Parameter #1 is executed on odd pages, parameter #2 on even pages.
82 \newif\ifSX@wasodd
83 \if@twoside
84   \newcommand*{\isSX@odd}[2]{%
85     \ifthenelse{\isodd{\pageref{\SX@IDENT}}}{%
86       {\SX@wasoddtrue #1}{\SX@wasoddfalse #2}%
87     }%
88   \newcommand*{\isSX@odd}[2]{#1}\SX@wasoddtrue
89 \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.

```

90 \newcounter{ltxexample}
91 \newcommand*{\SX@IDENT}{\SX@number\value{ltxexample}}
92 \newcommand*\SX@attachfile{%
93   \if@SX@attachfile
94     \attachfile[mimetype=text/plain,subject={example \theltxexample}]%
95     {\SX@codefile}{}%
96   \fi
97 }
```

`\SX@put@t/b/l/r/o/i` Six macros for positioning #2 (result) and #3 (code). The result can be above, below, left or right of the code area or on the outer or inner side. Parameter #1 is the width of the result.

```

98 \newcommand*\SX@put@t[3]{%
99   \SX@ResultArea{\linewidth}{#2}\endgraf\pagebreak[2]%
100  \setlength{\tempdima}{\SX@vsep}\vskip\tempdima
101  \SX@CodeArea{\linewidth}{#3}%
102 }
103 \newcommand*\SX@put@b[3]{%
104   \SX@CodeArea{\linewidth}{#3}\endgraf\pagebreak[2]%
105  \setlength{\tempdima}{\SX@vsep}\vskip\tempdima
106  \SX@ResultArea{\linewidth}{#2}%
107 }
108 \newcommand*\SX@put@l[3]{%
109  \setlength{\tempdimc}{\linewidth-#1-\SX@hsep}%
110  \SX@ResultArea{#1}{#2}\hfill\SX@CodeArea{\tempdimc}{#3}%
111 }
112 \newcommand*\SX@put@r[3]{%
113  \setlength{\tempdimc}{\linewidth-#1-\SX@hsep}%
114  \SX@CodeArea{\tempdimc}{#3}\hfill\SX@ResultArea{#1}{#2}%
115 }
116 \newcommand*\SX@put@o[3]{%
117  \@nameuse{SX@put@}\ifSX@wasodd r\else l\fi{#1}{#2}{#3}%
118 }
119 \newcommand*\SX@put@i[3]{%
120  \@nameuse{SX@put@}\ifSX@wasodd 1\else r\fi{#1}{#2}{#3}%
121 }
122 \newcommand\SX@ResultArea[2]{%
123   \SX@justification\setlength{\tempdima{#1}}%
124   \%minipage\tempdima\endminipage
125   \parbox{\tempdima}{#2}%
126 }
127 \newcommand\SX@CodeArea[2]{%
128   \setlength{\tempdima{#1}}%
129   \sbox{\tempboxa}{\parbox{\tempdima}{#2}}%
130   \tempdima=\dp\tempboxa\usebox{\tempboxa}
131   \rlap{\raisebox{-\tempdima}[0pt][0pt]{\SX@attachfile}}%
132 }
133 \newcommand*\SX@KillAboveCaptionskip{%
134   \ifx\lst@caption\empty\else
```

```

135      \lst@ifSubstring t\lst@captionpos
136          {\vskip-\abovecaptionskip}{}
137      \fi
138 }
139 \newcommand*\SX@KillBelowCaptionskip{%
140   \ifx\lst@caption\empty\else
141     \lst@ifSubstring b\lst@captionpos
142         {\vskip-\belowcaptionskip}{}
143     \fi
144 }

```

LTXexample

```

145 \lstnewenvironment{LTXexample}[1] []
146 {%
147   \temptokena{\#1}%
148   \begingroup
For "codefile=..." /"graphic=..." if \theltxexample or \thelstlisting is part of
the filename.
149   \advance\c@ltxexample\@ne \advance\c@lstlisting\@ne
150   \expandafter\lstset\expandafter{\SX@explpreset,\#1}%
151   \edef\x{\endgroup
152     \def\noexpand\SX@codefile{\SX@codefile}%
153     \def\noexpand\SX@graphicname{\SX@graphicname}%
154     \def\noexpand\SX@graphicparam{\SX@graphicparam}}%
155   \x
156   \xdef\SX@@explpreset{\the\temptokena,codefile=\SX@codefile,
157   graphic={[\SX@graphicparam]\{\SX@graphicname\}}}}%
158   \setbox\tempboxa=\hbox\bgroup% Warum noetig?
159   \lst@BeginWriteFile{\SX@codefile}%
160 }
161 {%
162   \lst@EndWriteFile\egroup
163   \SX@put@code@result
164 }

```

\SX@put@code@result

```

165 \newcommand*\SX@put@code@result{%
166   \begingroup
167   \expandafter\lstset\expandafter{\SX@explpreset}%
168   \let\lst@float=\relax\let\SX@float=\relax
Without the following call \lst@beginfloat is undefined.
169   \expandafter\lstset\expandafter{\SX@@explpreset}%
170   \ifx\lst@float\relax\else
\lst@float must be \relax because the whole "example" should float but not
the listings part in addition.
171   \let\SX@float=\lst@float\let\lst@float=\relax
172   \g@addto@macro\SX@@explpreset{,float=false}%
173   \edef\tempa{\noexpand\lst@beginfloat[\lstlisting]{\SX@float}}%
174   \expandafter\tempa
175   \fi
176   \ifx\lst@caption\empty

```

```

177      \lstset{nolol=true}%
178      \fi
179      \if@SX@wide\def\SX@overhang{\marginparwidth+\marginparsep}\fi
180      \trivlist\item\relax
181      \stepcounter{ltxexample}\label{\$X@IDENT}%
Make \$X@width a real dimension if the unit is missing.
182      \$X@defaultWD\$X@width{\$X@width}%
Set the default width if necessary.
183      \ifdim\$X@width<\z@
184          \tempswatru
185          \def@tempa{t}%
186          \ifx@\tempa\$X@pos\tempswafalse\fi
187          \def@tempa{b}%
188          \ifx@\tempa\$X@pos\tempswafalse\fi
189          \setlength@tempdima{\linewidth+\$X@overhang}%
190          \if@tempswa@tempdima=.5@tempdima\fi%
191          \edef\$X@width{\the@tempdima}%
192      \fi
Correct \$X@width if a frame is requested.
193      \ifx\$X@rframe\empty
194          \long\def\$X@frame##1##1}%
195      \else
196          \let\$X@frame\fbox
197          \setlength@tempdima{\$X@width-2\fboxsep-2\fboxrule}%
198          \edef\$X@width{\the@tempdima}%
199      \fi
200      \isSX@odd{\def@tempa{l}}{\def@tempa{r}}%
201      \makebox[\linewidth]{\@tempa}%
202          \parbox{\linewidth+\$X@overhang}%
\$X@codefile (\jobname.tmp) is not nessesaray for the filelist.
203      \let@addtolist@gobble
204      \let\lst@ifdisplaystyle=\iftrue
205      \SX@KillAboveCaptionskip\lst@MakeCaption{t}%
206      \lst@belowskip=\z@
Use the “natural” width of the result code if “varwidth” is true. .
207      \let\$X@MakeCaption\lst@MakeCaption
208      \let\lst@MakeCaption@gobble{}%
209      \setbox\$X@ResBox\hbox{%
210          \$X@frame{%
211              \nameuse{\if@SX@varwidth varwidth\else minipage\fi}%
212                  \$X@width\relax
213                  \begingroup
214                      \$X@resultInput
215                  \endgroup
216                  \nameuse{end\if@SX@varwidth varwidth\else minipage\fi}}}}%
217      \edef\$X@width{\the\wd\$X@ResBox}%
218      \ifundefined{\$X@put@\$X@pos}%
219          {\@latex@error{Parameter ‘\$X@pos’ undefined}\@ehd}%
220          {\nameuse{\$X@put@\$X@pos}%
221              {\$X@width}{\box\$X@ResBox}{\$X@codeInput}}%

```

```

222         \let\lst@MakeCaption\SX@MakeCaption
223         \lst@MakeCaption{b}\SX@KillBelowCaptionskip
224     }%
225   }%
226 \endtrivlist
227 \ifx\SX@float\relax\else\expandafter\lst@endfloat\fi
228 \gdef\SX@@explpreset{}%
229 \endgroup
230 }

231 \newcommand{\SX@SkipToFirst}{%
232   \ifeof@\inputcheck\else
233     \ifnum \lst@lineno=\lst@firstline\else
234       \readline@\inputcheck to\SX@tempa
235       \typeout{IGNORE (\the\lst@lineno)}%
236       \global\advance\lst@lineno@ne
237       \SX@SkipToFirst
238     \fi
239   \fi
240 }
241 \newcommand{\SX@ProcessResult}{%
242   \ifeof@\inputcheck
243     \let\SX@tempb\relax
244   \else
245     \let\SX@tempb\SX@ProcessResult
246     \ifnum \lst@lineno>\lst@lastline\relax
247       \ifx\lst@linerange@\empty
248         \let\SX@tempb\relax
249       \else
250         \lst@GetLineInterval
251         \SX@SkipToFirst
252       \fi
253     \else
254       \readline@\inputcheck to\SX@tempa
255       \typeout{READ (\the\lst@lineno)}%
256       \expandafter\g@addto@macro
257         \expandafter\SX@lines\expandafter{\SX@tempa^J}%
258       \global\advance\lst@lineno@ne
259     \fi
260   \fi
261   \SX@tempb
262 }

\SX@input
263 \newcommand{\SX@input[1]}{%
264   \begingroup
265   \IfFileExists{#1}{}{%
266     {%
267       \filename@parse{#1}%
268       \ifx\filename@ext\relax \def\filename@ext{tex}\fi
269       \@latexerr{File
270         '\filename@area\filename@base.\filename@ext' not found.^J^J}\@ehd%
271     }%
272     \openin\inputcheck#1

```

```

273 \lsthk@PreSet\let\lst@linerange\empty\global\lst@lineno\@ne
274 \expandafter\lstset\expandafter{\SX@explpreset}%
275 \ifx\lst@linerange\empty
276   \edef\lst@linerange{\{\lst@firstline}-{\lst@lastline},}%
277 \fi
278 \lst@GetLineInterval
279 \SX@Info
280 \newlinechar='^^J\relax
281 \SX@SkipToFirst\let\SX@lines\empty
282 \SX@ProcessResult
283 \closein@\inputcheck
284 \scantokens\expandafter{\SX@lines}%
285 \endgroup
286 }

287 \newcommand*\SX@Info{%
288   \typeout{-----}%
289   \typeout{pos=\SX@pos}%
290   \typeout{width=\SX@width}%
291   \typeout{hsep=\SX@hsep}%
292   \typeout{vsep=\SX@vsep}%
293   \typeout{overhang=\SX@overhang}%
294   \typeout{rframe=\SX@rframe}%
295   \typeout{codefile=\SX@codefile}%
296   \@ifundefined{lst@firstline}{}{%
297     {\typeout{\string\lst@firstline=\lst@firstline}}%
298   }%
299   \@ifundefined{lst@lastline}{}{%
299     {\typeout{\string\lst@lastline=\lst@lastline}}%
300   }%
301   \@ifundefined{lst@linerange}{}{%
301     {\typeout{\string\lst@linerange=\lst@linerange}}%
302   }%
303   \typeout{\string\if@SX@wide=\if@SX@wide TRUE\else FALSE\fi}%
304   \typeout{\string\if@SX@rangeaccept=\if@SX@rangeaccept TRUE\else FALSE\fi}%
305   \typeout{\string\if@SX@varwidth=\if@SX@varwidth TRUE\else FALSE\fi}%
306   \typeout{-----}%
307 }
308 \providecommand*\MakePercentIgnore{\catcode`\%9\relax}
309 \providecommand*\MakePercentComment{\catcode`\%14\relax}

\SX@resultInput
310 \newcommand*\SX@resultInput{%
311   \ifx\SX@graphicname\empty
312     \begingroup
313       \MakePercentComment\makeatother\catcode`^^M=5\relax
314       \SX@@preset\SX@preset
315       \if@SX@rangeaccept
316         \let\SX@tempa=\SX@input
317       \else
318         \let\SX@tempa=\input
319       \fi
320       \if\SX@scaled ?%
321         \let\SX@tempb=\@firstofone
322       \else
323         \if\SX@scaled !%

```

```

324          \def\SX@tempb##1{\resizebox{\SX@width}{!}{##1}}%
325      \else
326          \def\SX@tempb##1{\scalebox{\SX@scaled}{##1}}%
327      \fi
328  \fi
329  \SX@tempb{\SX@tempa{\SX@codefile}}\par
330  \endgroup
331 \else
332     \expandafter\includegraphics\expandafter[\SX@graphicparam]%
333     {\SX@graphicname}%
334 \fi
335 }

\SX@codeInput
336 \newcommand*\SX@codeInput{%
Without a caption entry the command \lstinputlisting adds the filename to
the “list of listings” (lol). This should be avoided.
337 \begingroup
The default parameters for all examples.
338 \expandafter\lstset\expandafter{\SX@explpreset}%
If ”numbers=none” then margin dimensions should be zero.
339 \expandafter\lstset\expandafter{\SX@@explpreset}%
340 \ifx\lst@PlaceNumber\empty
341     \g@addto@macro\SX@@explpreset{,xleftmargin=0pt,xrightmargin=0pt}%
342 \fi
343 \SX@Info
344 \expandafter\lstinputlisting\expandafter%
345 [\SX@@explpreset,nolol=true,caption={}] {\SX@codefile}%
346 \endgroup
347 }%

348 \newcommand*\LTXinputExample[2][]{%
349 \g@addto@macro\SX@@explpreset{#1,codefile=#2}%
350 \SX@put@code@result}%

All the default values.
351 \lstset{explpreset={numbers=left,numberstyle=\tiny, numbersep=.3em,
Negative width means defaults.
352 xleftmargin=1em,columns=flexible,language=[LaTeX]TEX,pos=1,width=-99pt,
353 overhang=0pt,hsep=\columnsep,vsep=\bigskipamount,rframe=single}

.
354 \AtBeginDocument{%
355 \def\theHlstnumber{\thelstlisting.\arabic{lstnumber}. \lst@neglisting}%
356 }

Changing the defaults possible in showexpl.cfg.
357 \InputIfFileExists{showexpl.cfg}{}{}
```

Change History

v0.1a		v0.3a	
General: “hpos” and “vpos” added, “pos” removed (RN).	3	General: “attachfile” added (RN).	3
Initial version	1	<code>\SX@attachfile</code> : Attach file func- tionality (with pdfTEX) added (RN).	5
v0.1b		v0.3b	
<code>\SX@put@t/b/1/r/o/i</code> : Positioning the captions more independend of the result and code area (RN).	5	<code>\SX@resultInput</code> : Input of re- sult code now inside a group; <code>\makeatother</code> added (RN).	9
v0.1c		v0.3c	
<code>\SX@put@t/b/1/r/o/i</code> : Commands <code>\SX@KillAboveCaptionskip</code> and <code>\SX@KillBelowCaptionskip</code> added (RN).	5	<code>\SX@resultInput</code> : Wrong catcode for newline char corrected (RN).	9
v0.1f		v0.3d	
General: “lstpreset” added. (RN). . .	3	<code>\SX@resultInput</code> : Missing <code>\par</code> added (RN).	9
v0.1h		v0.3e	
General: “codefile” added. (RN).	3	<code>\SX@opreset</code> : More redefinitions added (RN).	4
“lstpreset” renamed to “explpre- set” (RN).	3	v0.3g	
New macro <code>\LTXinputExample</code> (RN).	10	General: <code>\SX@ProcessResult</code> is now working correctly using <code>\readline</code> and <code>\scantokens</code> . Thanks to Ulrich Diez for help (RN).	8
<code>LTXexample</code> : Renamed from “exam- ple” to “LTXexample’ (RN).	6	Missing <code>\newcommand</code> for <code>\SX@explpreset</code> added (RN).	4
v0.1i		v0.3h	
General: Better caption positioning and correct distance between the parts (RN).	6	General: New Option ‘attachfiles’ (RN).	3
v0.1j		v0.3j	
General: “rangeaccept” added (RN).	3	<code>\SX@put@code@result</code> : Setting <code>\lst@MakeCaption</code> to was a bad idea for hyperlinks. Group added to varwidth environ- ment. (Suggestions by Ulrike Fischer.).	7
<code>\SX@input</code> : For ranges of lines (RN).	8	v0.3k	
v0.1k		General: Definition for “hyperref” (suggested by Heiko Oberdiek)	10
General: Some bug corrections (RN).	3	<code>\SX@put@code@result</code> : Setting <code>\lst@MakeCaption</code> to <code>\@gobble</code> again (prevent multiply defined labels; label key)	7
<code>\SX@put@t/b/1/r/o/i</code> : Change [a]bove to [t]op (RN).	5	v0.3l	
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