`mcode.sty` Demo

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Installation of the package

As with any other package, just place the `mcode.sty` file in the same folder as your document, or put it somewhere where LaTeX can find it. That's all!

Usage — 3 ways

1) This inline demo `for i=1:3, disp('cool'); end;` uses the `\mcode{}` command.

2) The following is a block using the `lstlisting` environment.

```matlab
1  for i = 1:3
2      if i ≥ 5                     % literate programming replacement
3          disp('cool');           % comment with some LaTeX in it:  πx²
4      end
5      x_last = x(end);            % using "x(iend)" here!
6      really really long really really long really really long ...
           really really long really really long % blaaaaaaaa
7  end
```

Note: Here, the package was loaded with the `framed`, `numbered`, `autolinebreaks` and `useliterate` options. **Please see the top of mcode.sty for a detailed explanation of these options.**

3) Finally, you can also directly include an external m-file from somewhere on your hard drive (the very code you use in MATLAB, if you want) using the

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`\lstinputlisting{/SOME/PATH/FILENAME.M}` command. If you only want to include certain lines from that file (for instance to skip a header), you can use `\lstinputlisting[firstline=6, lastline=15]{/SOME/PATH/FILENAME.M}`.

Remkarks

`end` / end: As pointed out by "turker" in a comment at the MATLABCENTRAL listing of the package, there are issues with the command **end** which has two functions: (1) to delimit things like loops like `for` etc., and (2) access the last element in a vector. In the first case, (cf. line 7) it should be typeset in blue (and that's the default here); in the second (cf. line 5) it should be black. If you insist on those indexing-"ends" to be typeset in black, replace them by `iend` in your source code. While this will break the MATLAB code, at least you can get it typeset in black... Not a pretty trade off, but I don't see another way out.

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