1 Introduction

One major drawback of the greek option of the babel package is that one cannot easily write both Latin and Greek verbatim text. This is particularly useful for computer listings and, more generally, in computer science related texts. This package solves this problem by introducing the environment \texttt{grverbatim} and the command \texttt{grverb} whose functionality is identical to the functionality of the corresponding standards. A public domain font is used by both the command and the environment. The font conforms to the ISO-8859-7 encoding for the Greek language.

2 The code

The first thing we do is to identify the package.

\begin{verbatim}
\NeedsTeXFormat{LaTeX2e}[1996/01/01]
\ProvidesPackage{grverb}[1999/12/06 \space v1.0]
\typeout{Package: 'grverb' v1.0 \space <1999/12/06> (A. Syropoulos)}
\end{verbatim}

Since, we are going to use most characters with slot numbers above 127, we need a macro to assign to a range of characters catcode 11 (letter). The following macro is a modified version of macro \texttt{\inpenc@loop} which is defined in the package inputenc.

\begin{verbatim}
\@gr@inpenc@loop
\def\@gr@inpenc@loop#1#2{%
\@tempcnta#1\relax
\loop\catcode\@tempcnta11\relax\loop
\catcode\@tempcnta11
\end{verbatim}
The package uses the (public domain) font “Greek-CourierPlain” as the default verbatim font. Since, this font is not known to the NFSS, we need to write down the necessary definitions. We introduce a new family and since the design size of the new verbatim font is slightly larger than that of the cb fonts (i.e., the standard fonts used with the greek option of the babel package), we need to shrink a little bit the character size so that they match with the rest of the text.

\DeclareFontFamily{U}{grtt}{}
\DeclareFontShape{U}{grtt}{m}{n}{<-> s * [0.9] grcour8a}{}

We now define the new environment. The code is actually derived from code which appears in the file ltmiscen.dtx in the standard \LaTeX{}2e distribution. We define the new environment \texttt{grverbatim} which uses the new verbatim font, instead of the standard one, and which assigns to particular list of characters catcode 11. Note, that these changes are local, so not to affect the behavior of \LaTeX{}.

\grverbatim
\endgrverbatim

\begin{verbatim}
\end{verbatim}

We don’t use the standard verbatim font, so we define a command to use the new verbatim font. This allows us to use the usual verbatim commands and environments without any problem.

\gr@verbatim@font

42 \def\gr@verbatim@font{\fontencoding{U}\fontfamily{grtt}\fontseries{m}\%
43 \selectfont}

The last thing we do is to define the new command \grverb. The command is actually a modified version of the \verb command. The new thing is that many non-letter characters become letters and we use the Greek verbatim font instead of the standard one.

\grverb

44 \def\grverb{\relax\ifmmode\hbox\else\leavevmode
45 \null\fi\bgroup\@gr@inpenc@loop\^^A\^^H%
46 \@gr@inpenc@loop\^^K\^^K%
47 \@gr@inpenc@loop\^^N\^^_%
48 \@gr@inpenc@loop\^^?\^^ff%
49 \verb@eol@error \let\do\@makeother \dospecials
50 \gr@verbatim@font\@noligs \@verb}
52 (/package)

Acknowledgment

I thank Antonios Tsolomitis for bringing to my attention this particular problem and for testing the proposed solution.

Dedication

I would like to dedicate this piece of work to my son

Demetrios-Georgios.