



The XePersian Package

User documentation for version 22.8

to my Master, Ferdowsi The Great

If you want to report any bugs or typos and corrections in the documentation, or ask for any new features, or suggest any improvements, or ask any questions about the package, then please use the issue tracker:

<https://github.com/bidi-tex/xepersian/issues>

In doing so, please always explain your issue well enough, and always include a minimal working example showing the issue.

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The XePersian Package

Persian for L^AT_EX 2_&, using XeT_EX engine

User documentation for version 22.8

Vafa Khalighi*

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1 Introduction

XePersian is a package for typesetting Persian/English documents with Xe^AT_EX. The package includes adaptations for use with many other commonly-used packages.

1.1 Important Notes

- ☒ The XePersian package only works with XeTeX engine.
- ☒ Before reading this documentation, you should have read the documentation of the bidi package. The XePersian package automatically loads bidi package with RTLdocument option enabled and hence any commands that bidi package offers, is also available in XePersian package. Here, in this documentation, we will not repeat any of bidi package's commands.
- ☒ In previous versions ($\leq 1.0.3$) of XePersian, a thesis class provided for typesetting thesis. As of version 1.0.4, we no longer provide this class because we are not familiar with specification of a thesis in Iran and even if we were, the specifications are different from University to University. XePersian is a general package like L^AT_EX and should not provide any class for typesetting thesis. So if you really want to have a class file for typesetting thesis, then you should ask your University/department to write one for you.

1.2 XePersian Info On The Terminal and In The Log File

If you use XePersian package to write any input TeX document, and then run *xelatex* on your document, in addition to what bidi package writes to the terminal and to the log file, the XePersian package also writes some information about itself to the terminal and to the log file, too. The information is something like:

```
*****
*
* xepersian package (Persian for LaTeX, using XeTeX engine)
*
* Description: The package supports Persian
* typesetting, using fonts provided in the
* distribution.
*
* Copyright (c) 2008-2019 Vafa Khalighi
*           2018-2020 bidi-tex GitHub Organisation
*
* v22.8, 2020-01-31
*
* License: LaTeX Project Public License, version
* 1.3c or higher (your choice)
*
* Location on CTAN: /macros/xetex/latex/xepersian
```



```

*
* Issue tracker: https://github.com/bidi-tex/xepersian/issues
*
*****

```

2 Basics

2.1 Loading The Package

You can load the package in the ordinary way;

```
\usepackage [Options] {xepersian}
```

Where `options` of the package are explained later in [subsection 2.4](#).

When loading the package, it is important to know that:

- ❶ `xepersian` should be the last package that you load, because otherwise you are certainly going to overwrite `bidi` and `XePersian` package's definitions and consequently, you will not get the expected output.
- ❷ In fact, in addition to `bidi`, `XePersian` also makes sure that some specific packages are loaded before `bidi` and `XePersian`; these are those packages that `bidi` and `XePersian` modifies them for bidirectional and Persian/English type-setting.

If you load `XePersian` before any of these packages, then you will get an error saying that you should load `XePersian` or `bidi` as your last package. When it says that you should load `bidi` package as your last package, it really means that you should load `XePersian` as your last package as `bidi` package is loaded automatically by `XePersian` package.

For instance, consider the following minimal example:

```

1 \documentclass{minimal}
2 \usepackage{xepersian}
3 \usepackage{enumerate}
4 \settextfont{XB Niloofar}
5 \begin{document}
6 این فقط یک آزمایش است
7 \end{document}

```

Where `enumerate` is loaded after `XePersian`. If you run `xelatex` on this document, you will get an error which looks like this:

```

! Package xepersian Error: Oops! you have loaded package enumerate
after xepersian package. Please load package enumerate before
xepersian package, and then try to run xelatex on your document
again.

```



```

See the xepersian package documentation for explanation.
Type H <return> for immediate help.
...
1.5 \begin{document}
?

```

2.2 XePersian's Symbol

As you may know lion symbolizes T_EX but lion does not symbolizes XePersian. Simorgh¹ (shown on the first page of this documentation) symbolizes XePersian.

2.3 Commands for Version number, and Date of The Package

```
\xepersianversion \xepersiandate
```

☞ \xepersianversion gives the current version of the package.

☞ \xepersiandate gives the current date of the package.

```

1 \documentclass{article}
2 \usepackage{xepersian}
3 \settextfont{XB Niloofer}
4 \begin{document}
5 \begin{latin}
6 This is typeset by \textsf{\XePersian} package, \xepersianversion,
7 \xepersiandate.
8 \end{latin}
9 \end{document}
```

2.4 Options of The Package

There are few options:

2.4.1 defaultlatinfontfeatures Option

```
defaultlatinfontfeatures=<value>
```

The `defaultlatinfontfeatures` option allows you to pass font features to the main Latin font. `<value>` is a set of font features.

¹Simorgh is an Iranian benevolent, mythical flying creature which has been shown on the titlepage of this documentation. For more details see <http://en.wikipedia.org/wiki/Simurgh>



2.4.2 extrafootnotefeatures Option

This is just the `extrafootnotefeatures` Option of `bidi` package. If you enable this option, you can typeset footnotes in paragraph form or in multi-columns (from two-columns to ten-columns). For more details, please read the manual of `bidi` package.

2.4.3 Kashida Option

If you pass `Kashida` option to the package, you will use Kashida for stretching words for better output quality and getting rid of underfull or overfull `\hbox` messages.

Note that you can not use `Kashida` option when you are using Nastaliq-like font (well, you still can use `Kashida` option when you use any Nastaliq-like font, but I can not guarantee high quality output!).

The following two commands are provided when you activate the `Kashida` option:

```
\KashidaOn \KashidaOff
```

☞ `\KashidaOn` enables Kashida and is active by default when `Kashida` option is activated.

☞ `\KashidaOff` disables Kashida.

2.4.4 quickindex Option

When you generally want to prepare index for your Persian documents, you need to first run `xelatex`, then `xindy`, and again `xelatex` on your document respectively, which is very time consuming. The `quickindex` option gives you the index with only and only one run of `xelatex`. To use this feature, you will need to run `xelatex --shell-escape` on your `TeX` document; otherwise you get an error which indicates that shell scape (or write18) is not enabled.

This option is now obsolete and equivalent to `quickindex-variant2` option.

2.4.5 quickindex-variant1 Option

Same as `quickindex` Option but uses variant one (in which `\i` is grouped under `\l`) for sorting Persian alphabets.

2.4.6 quickindex-variant2 Option

Same as `quickindex` Option but uses variant two (in which `\i` is a separate letter) for sorting Persian alphabets.



2.4.7 localise Option

This option allows you to use most frequently-used L^AT_EX commands and environments in Persian, almost like what T_EX-e-Parsi offers. This is still work in progress and we wish to add lots more Persian equivalents of L^AT_EX and T_EX commands and environments. The Persian equivalents of L^AT_EX and T_EX commands are shown in [Table 1](#), The Persian equivalents of XePersian commands are shown in [Table 2](#), Persian equivalents of L^AT_EX environments are shown in [Table 3](#) and Persian equivalents of XePersian environments are shown in [Table 4](#)

Please note that the Persian equivalents of L^AT_EX and T_EX commands and environments are only available after loading `xepersian` package. This means that you have to write all commands or environments that come before `\usepackage{xepersian}`, in its original form, i.e. `\documentclass`.

Not only you can use Persian equivalents of L^AT_EX and T_EX commands and environments, but still original L^AT_EX and T_EX commands and environments work too.

The T_EX L^AT_EX and XePersian commands and environments and their Persian equivalents listed in [Table 1](#), [Table 2](#), [Table 3](#) and [Table 4](#) is not the whole story; If any command and environment in [Table 1](#), [Table 2](#), [Table 3](#) and [Table 4](#) have a starred version, their starred version also work. For example in [Table 1](#), the Persian equivalent of `\chapter` is `\فصل`. I know that `\chapter` has a starred version, so this means `*\فصل` is also the Persian equivalent of `\chapter*`. Is that clear?

However there is more; you can localise any other commands/environments you want. You can use the following commands to localise your own commands/environments:

```
\eqcommand{\<command-name in Persian>}{\<original LATEX command-name>}
\eqenvironment{\<environment-name in Persian>}{\<original LATEX environment-name>}
```

Table 1: The Equivalent L^AT_EX and T_EX Commands

Command in T _E X or L ^A T _E X	Equivalent Persian Command
<code>\@arstrut</code>	\شمع جدول
<code>\above</code>	\فوق
<code>\abovedisplayshortskip</code>	\فاصله کوتاه بالای نمایش
<code>\abovedisplayskip</code>	\فاصله بالای نمایش
<code>\abstractname</code>	\عنوان چکیده
<code>\accent</code>	\اکسنت
<code>\active</code>	\فعال
<code>\addcontentsline</code>	\یافزار سطر فهرست
<code>\addpenalty</code>	\اضافه بر جریمه
<code>\address</code>	\نشانی

Continued on next page



Command in TeX or L ^A T _E X	Equivalent Persian Command
\addtocontents	\بیفزایه‌فهرست
\addtocounter	\اضافه‌برشمارنده
\addtolength	\اضافه‌بربعد
\addvspace	\بیفزایضای و
\adjdemerits	\تنظیم‌بدنمایی
\advance	\بیفزایر
\afterassignment	\بعدازانتساب
\aftergroup	\بعدازگروه
\aleph	\الف
\aliasfontfeature	\خصیصه مستعارقلم
\aliasfontfeatureoption	\انتخاب خصیصه مستعارقلم
\allowbreak	\شکستنی
\alloc@	@تخصی
\allocationnumber	\تخصیص‌یافته
\allowdisplaybreaks	\شکست‌نمایش‌مجاز
\Alph	\حروف‌بزرگ
\alph	\حروف کوچک
\alsooname	\نام‌همچنین
\and	\و
\angle	\زاویه
\appendixname	\عنوان‌پیوست
\approx	\تقریب
\arabic	\عربی
\arg	\آرگ
\arrayrulecolor	\رنگ خط جدول
\arraycolsep	\فاصله ستونهای آرایه
\arrayrulewidth	\ضخامت خط جدول
\arraystretch	\کشیدگی آرایه
\AtBeginDocument	\درآغارنوشتار
\AtEndDocument	\درپایان‌نوشتار
\AtEndOfClass	\درانتهای طبقه
\AtEndOfPackage	\درانتهای سبک
\author	\نویسنده
\backmatter	\مطلوب‌پشت
\backslash	\شکاف‌پشت
\badness	\بدنمایی
\bar	\میله
\baselineskip	\فاصله کرسی
\baselinestretch	\کشش فاصله کرسی
\batchmode	\پردازش‌دسته‌ای

Continued on next page



Command in TeX or L ^A T _E X	Equivalent Persian Command
\begin	\شروع
\beginL	\شروع چپ
\beginR	\شروع راست
\begingroup	\شروع گروه
\belowdisplayshortskip	\فاصله کوتاه پایین نمایش
\belowdisplayskip	\فاصله پایین نمایش
\bf	\سیاه
\bfdefault	\پیش فرض سیاه
\bfseries	\شمایل سیاه
\bgroup	\شرگرد
\bibitem	\مرجوع
\bibliography	\کتاب نامه
\bibliographystyle	\اسک کتاب نامه
\bibname	\عنوان کتاب نامه
\bigskip	\پرش بلند
\bigskipamount	\مقدار پرش بلند
\botfigrule	\خط پایین شناور
\botmark	\علامت پایین
\bottomskip	\کادر تا پایین
\bottomfraction	\نسبت پایین
\box	\کادر
\boxmaxdepth	\حداکثر عمق کادر
\break	\ بشکن
\bullet	\ گله
\@cclv	\ دوپن @ پنج
\@cclvi	\ دوپن @ شش
\caption	\ شرح
\catcode	\ کدرده
\cc	\ رونوشت
\ccname	\ نام رونوشت
\cdot	\ نقطه وسط
\cdots	\ نقاط وسط
\centering	\ تنظیم از وسط
\centerline	\ خط وسط
\ch@ck	\ چک @ ن
\chapter	\ فصل
\chaptername	\ عنوان فصل
\char	\ نویسه
\chardef	\ تعریف نویسه
\CheckCommand	\ بررسی فرمان

Continued on next page



Command in T_EX or L_AT_EX Equivalent Persian Command

\cite	\مرجع
\ClassError	\خطای طبقه
\ClassInfo	\اطلاع طبقه
\ClassWarning	\هشدار طبقه
\ClassWarningNoLine	\هشدار طبقه بی سطر
\leaders	\نشانگر مرکزی
\cleardoublepage	\دو صفحه پاک
\clearpage	\صفحه پاک
\cline	\خط ناپر
\closein	\بند ورودی
\closeout	\بند خروجی
\closing	\بس تن
\clubpenalty	\حریمه سریند
\clubsuit	\جاج
\colbotmark	\علامت پایین ستون اول
\colfirstmark	\علامت اول ستون اول
\color	\رنگ
\colorbox	\کادر رنگ
\coltopmark	\علامت بالای ستون اول
\columncolor	\رنگ ستون
\columnsep	\بین ستون
\columnwidth	\پهناي ستون
\columnseprule	\خط بین ستون
\contentsline	\سطر فهرست
\contentsname	\عنوان فهرست مطالب
\copy	\کپی
\copyright	\حق تالیف
\count	\شمار
\count@	@\شمار
\countdef	\تعريف شمار
\cr	\سخ
\crcr	\سخ سخ
\csname	\نام فرمان
\CurrentOption	\گزینه جاري
\dashbox	\کادر بینایی
\dashv	\بینایی ع
\@date	@\تاریخ
\date	\تاریخ
\day	\روز
\dblbotfigrule	\خط پایین شناور پهن

Continued on next page



Command in TeX or L ^A T _E X	Equivalent Persian Command
\dblbottomfraction	\نسبت‌پهن‌پایین
\dblfigrule	\خط‌بالای‌شناور‌پهن
\dblfloatpagefraction	\نسبت‌صفحه‌شناور‌پهن
\dblfloatsep	\فاصله‌بین‌شناور‌پهن
\dblfontlocatecode	\کد‌مکان‌غیره‌مانطور
\dbltextfloatsep	\فاصله‌متن‌و‌شناور‌پهن
\dbltopfraction	\نسبت‌پهن‌بالا
\DeclareFixedFont	\اعلان‌قلم‌ثابت
\DeclareGraphicsExtensions	\اعلان‌پسوند‌گرافیک
\DeclareGraphicsRule	\اعلان‌دستور‌گرافیک
\DeclareOldFontCommand	\اعلان‌فرمان‌قلم‌قدیمی
\DeclareOption	\اعلان‌گزینه
\DeclareRobustCommand	\اعلان‌فرمان‌قوى
\DeclareSymbolFont	\اعلان‌قلم‌علائم
\deadcycles	\دوربسته
\def	\تر
\define@key	\تعريف‌@کلید
\definecolor	\تعريف‌رنگ
\deg	\درجہ
\delcode	\کد‌جاساز
\delimiter	\جداساز
\delimiterfactor	\ضریب‌جdasاز
\depth	\گودی
\diamondsuit	\خشتم
\dim	\ابعاد
\dimen	\بعد
\dimen@	\بعد
\dimen@i	\بعد‌@یک
\dimen@ii	\بعد‌@دو
\dimendef	\تعريف‌بعد
\discretionary	\تیره‌گذاری
\displaybreak	\شکست‌نمایش
\displayindent	\تورفتگی‌نمایش
\displaystyle	\سبک‌نمایش
\displaywidth	\عرض‌نمایش
\divide	\ تقسیم
\documentclass	\طبقه‌نوشتار
\do	\کن
\dospecials	\تعویض‌کدها
\dot	\ نقطه

Continued on next page



Command in TeX or L ^A T _E X	Equivalent Persian Command
\doteq	\ نقطه مساوی
\dotfill	\ پر نقطه ا
\dots	\ نقطاط
\doublebox	\ کادر دولا
\doublerulesepcolor	\ رنگ فاصله دو خط جدول
\doublerulesep	\ فاصله بین دو خط
\downarrowarrow	\ فلاش پایین
\dp	\ عمق
\dump	\ تخلیه
\edef	\ ترگ
\egroup	\ پاگروه
\eject	\ انتهاي فاصله
\else	\ گرنه
\em	\ تاكيد
\emergencystretch	\ کشش لا جرم
\emph	\ موکد
\@empty	\ پوج @ \
\empty	\ پوج
\emptyset	\ مجموعه پوج
\end	\ پيان
\endL	\ پيان چپ
\endR	\ پيان راست
\endcsname	\ پيان نام فرمان
\endfirsthead	\ پيان اولين سر
\endfoot	\ پيان پا
\endgraf	\ آه بند
\endgroup	\ پيان گروه
\endhead	\ پيان سر
\endinput	\ پيان ورودي
\endlastfoot	\ پيان آخرین پا
\enlargethispage	\ گسترش اين صفحه
\endline	\ ته سطر
\endlinechar	\ نويسه ته سطر
\enspace	\ ان دورى
\enskip	\ ان فاصله
\eqcommand	\ فرمان جانشين
\eqenvironment	\ محيط جانشين
\eqref	\ ارجاع فر
\errhelp	\ كمک خطا
\errmessage	\ پيام خطا

Continued on next page



Command in TeX or L ^A T _E X	Equivalent Persian Command
\errorcontextlines	\اسطرمن خطا
\errorstopmode	\پردازش توقف خطا
\escapechar	\انویسه ویژه
\euro	\یورو
\evensidemargin	\حاشیه زوج
\everycr	\هرسخ
\everydisplay	\هرنمايش
\everyhbox	\هرکادرا
\everyjob	\هرکار
\everymath	\هرریاضی
\everypar	\هربند
\everyvbox	\هرکادرو
\ExecuteOptions	\اجرای گزینه ها
\exhyphenpenalty	\حریمه اضافی تیره بندی
\expandafter	\بگستر پس از
\extracolsep	\فاصله اضافی بین ستونها
\@firstofone	\اولی از یک
\@firstoftwo	\اولی از دو
\f@ur	\ج@ار
\fam	\خانواده
\fancypage	\صفحه تجملی
\fbox	\کادر با
\fboxrule	\ضخامت کادر با
\fboxsep	\حاشیه کادر با
\fcolorbox	\کادر بارنگ
\fi	\ارگ
\figurename	\عنوان شکل
\filbreak	\پرسکن
\fill	\پر
\firstmark	\اعلامت اول
\flat	\پهن
\floatpagefraction	\نسبت صفحه شناور
\floatingpenalty	\حریمه شناور
\floatsep	\فاصله بین شناور
\flushbottom	\تنظیم از پایین
\fmtname	\شكلبندی
\fmtversion	\ردہ شکلبندی
\fnsymbol	\نشانه
\font	\قلم
\fontdimen	\بعد قلم

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\fontencoding	\رمزنیه قلم
\fontfamily	\فamil قلم
\fontname	\نام قلم
\fontseries	\شمايل قلم
\fontshape	\شك قلم
\fontsize	\اندازه قلم
\footheight	\بلنداي پاپين صفحه
\footins	\درج زيرنويس
\footnote	\زيرنويس
\footnotemark	\علامت زيرنويس
\footnoterule	\خط زيرنويس
\footnotesep	\فاصله تازيرنويس
\footnotesize	\اندازه زيرنويس
\footnotetext	\متن زيرنويس
\footskip	\فاصله تاپاپين صفحه
\frame	\فريم
\framebox	\کادر باخت
\frenchspacing	\فواصليکنواخت لاتين
\frontmatter	\مطلوب پيش
\futurelet	\بعد بگذار
\@gobble	@\خور حريصانه
\@gobbletwo	@\خور حريصانه دو
\@gobblefour	@\خور حريصانه چهار
\@gtempa	\عاقت آ
\@gtempb	\عاقت ب
\gdef	\ترع
\GenericInfo	\الگوي اطلاع
\GenericWarning	\الگوي هشدار
\GenericError	\الگوي خطا
\global	\عام
\globaldefs	\تعاريق عام
\glossary	\لغت نامه
\glossaryentry	\فقره فرهنگ
\goodbreak	\خوش شکن
\graphpaper	\کاغذ گراف
\guillemotleft	\گيومه چپ
\guillemotright	\گيومه راست
\guilsinglleft	\گيومه تکي چپ
\guilsinglright	\گيومه تکي راست
\halign	\رديفا

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Command in T_EX or L_AT_EX Equivalent Persian Command

\hang	\برو تو
\hangafter	\بعد از سطر
\hangindent	\تورفتگی ثابت
\hbadness	\ابد نمایی ا
\hbox	\کادرا
\headheight	\بلندای سر صفحه
\headsep	\فاصله از سر صفحه
\headtoname	\سر به نام
\heartsuit	\دل
\height	\بلندا
\hfil	\پرا
\hfill	\پررا
\hfilneg	\رفع پرا
\hfuzz	\پر زافقی
\hideskip	\فاصله مخفی
\hidewidth	\عرض پنهان
\hline	\خط پر
\hoffset	\حاشیه ا
\holdinginserts	\حفظ درج
\hrboxsep	\فاصله اگرد
\hrule	\خط ا
\rulefill	\پر خط ا
\hsize	\طول سطر
\hskip	\فاصله ا
\hspace	\فضای ا
\hss	\هر دوا
\ht	\ارتفاع
\huge	\بزرگ
\Huge	\بزرگ تر
\hyperlink	\ابر پیوند
\hypersetup	\بارگذاری ابر
\hypertarget	\هدف ابر
\hyphenation	\تیره بندی
\hyphenchar	\نویسه تیره
\hyphenpenalty	\جریمه تیره بندی
\@ifclassloaded	@\اگر کلاس فراخوانی شده
\@ifdefinable	@\اگر ترشد نی
\@ifnextchar	@\اگر نویسه بعدی
\@ifpackageloaded	@\اگر سبک فراخوانی شده
\@ifstar	@\اگر ستاره

Continued on next page



Command in TeX or L ^A T _E X	Equivalent Persian Command
\@ifundefined	\گرتعريف نشده
\if	\اگر
\if@tempswa	\اگر سواقت آ
\ifcase	\اگرانواع
\ifcat	\اگر رد ه
\ifdefined	\اگر تعريف شده
\ifdim	\اگر بعد
\ifeof	\اگر ته پرونده
\iff	\اگر ر
\iffalse	\اگر نادرست
\IfFileExists	\اگر پرونده موجود
\ifhbox	\اگر کادرا
\ifhmode	\اگر حالت ا
\ifinner	\اگر درونی
\ifmmode	\اگر حالت ریاضی
\ifnum	\اگر عدد
\ifodd	\اگر فرد
\ifthenelse	\اگر آنگاه دیگر
\iftrue	\اگر درست
\ifvbox	\اگر کادرو
\ifvmode	\اگر حالت و
\ifvoid	\اگر تهی
\ifx	\اگر قائم
\ignorespaces	\فاصله خالی راندیده بگیر
\immediate	\فوری
\include	\شامل
\includegraphics	\درج تصویر
\includeonly	\مشمولین
\indent	\تورفتگی
\index	\درنمايه
\indexentry	\استعلام
\indexname	\عنوان نمایه
\indexspace	\فاصله رهنما
\input	\وردی
\InputIfFileExists	\ورود پرونده گر موجود
\inputlineno	\شماره سطر ورودی
\insert	\درج
\insertpenalties	\جریمه درج
\interfootnotelinepenalty	\جریمه بین سطرهای زیرنویس
\interdisplaylinepenalty	\جریمه بین سطرهای نمایش

Continued on next page



Command in TeX or L ^A T _E X	Equivalent Persian Command
\interlinepenalty	\جریمه بین سطرها
\intertext	\متن داخلی
\intertextsep	\فاصله شناور در متن
\invisible	\مخفي
\itdefault	\پيش فرض اي
\itshape	\شكل ايتاليك
\item	\فقره
\itemindent	\تورفتگي فقره
\itemsep	\فاصله فقره
\iterate	\تكرار کن
\itshape	\شکل اي
\jobname	\نام کار
\jot	\قلپ
\kern	\دورى
\kill	\الگو
\label	\برچسب
\labelenumi	\برچسب شمارش يك
\labelenumii	\برچسب شمارش دو
\labelenumiii	\برچسب شمارش سه
\labelenumiv	\برچسب شمارش چهار
\labelitemi	\برچسب فقره يك
\labelitemii	\برچسب فقره دو
\labelitemiii	\برچسب فقره سه
\labelitemiv	\برچسب فقره چهار
\labelsep	\فاصله از برچسب
\labelwidth	\پهنانی برچسب
\language	\ازبان
\large	\درشت
\Large	\درشت تر
\LARGE	\درشت درشت
\lastbox	\آخرین کادر
\lastkern	\آخرین دورى
\lastpenalty	\آخرین جريمه
\lastskip	\آخرین فاصله
\LaTeX	\لاتک
\LaTeXe	\لاتک اي
\lccode	\اکد کوچک
\ldots	\نقطاخ
\leaders	\نشانگر
\leavevmode	\ترك و

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Command in T_EX or L_AT_EX Equivalent Persian Command

\left	\چپ
\leftmargin	\حاشیه چپ
\leftmargini	\حاشیه چپ یک
\leftmarginii	\حاشیه چپ دو
\leftmarginiii	\حاشیه چپ سه
\leftmarginiv	\حاشیه چپ چهار
\leftmarginv	\حاشیه چپ پنجم
\leftmarginvi	\حاشیه چپ شش
\leftmark	\علامت چپ
\leftpageskip	\اکادر تا چپ
\leftskip	\فاصله ابتدای سطر
\let	\بگذار
\line	\سطر
\linebreak	\سطر شکن
\linepenalty	\جریمه سطر
\lineskip	\فاصله سطرها
\lineskiplimit	\حد فاصله سطر
\linespread	\کشش فاصله سطر
\linethickness	\ضخامت خط
\linewidth	\پهنه ای سطر
\listfigurename	\عنوان فهرست اشکال
\listfiles	\لیست پرونده ها
\listoffigures	\فهرست اشکال
\listoftables	\فهرست جداول
\listparindent	\تورفتگی بند لیست
\listtablename	\عنوان فهرست جداول
\LoadClass	\بارگذار کن طبقه
\LoadClassWithOptions	\بارگذار کن طبقه با گزینه
\location	\مکان
\long	\بلند
\loop	\حلقه
\looseness	\گسیختگی
\lower	\انتقال پایین
\@makeother	\@ دیگر
\@m	\@ زار
\@M	\د@ زار
\@Mi	\د@ زاریک
\@Mii	\د@ زاردو
\@Miii	\د@ زارسه
\@Miv	\د@ زار چهار

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\@MM	\بیس@زار
\m@ne	\من@ا
\mag	\بزرگنمایی
\magstep	\گام
\magstephalf	\نیمگام
\mainmatter	\مطلوب اصلی
\makeatletter	\ات حرف
\makeatother	\ات دیگر
\makebox	\کادری خط
\makeglossary	\ساخت فرهنگ
\makeindex	\تهیه نمایه
\makelabel	\ساخت برچسب
\makelabels	\ساخت برچسب ها
\MakeLowercase	\ساخت حروف کوچک
\maketitle	\عنوان ساز
\MakeUppercase	\ساخت حروف بزرگ
\marginpar	\در حاشیه
\marginparpush	\فاصله دو حاشیه
\marginparsep	\فاصله تا حاشیه
\marginparwidth	\پنهانی حاشیه
\mark	\علامت
\markboth	\علامت در دو طرف
\markright	\علامت در راست
\mathaccent	\اعراب ریاضی
\mathchar	\نویسه ریاضی
\mathchardef	\معرفی نویسه ریاضی
\mathcode	\کد ریاضی
\mathrm	\ریاضی رومان
\maxdeadcycles	\حد اکثر تکرار
\maxdepth	\حد اکثر عمق صفحه
\maxdimen	\بعد بیشین
\mbox	\کادری
\mdseries	\شمایل نازک
\meaning	\معنا
\mediumseries	\نازک
\medmuskip	\فاصله متوسط ریاضی
\medskip	\پرش متوسط
\medskipamount	\مقدار پرش متوسط
\medspace	\فضای متوسط
\message	\پیام

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\MessageBreak	\پیام‌شکن
\minrowclearance	\حداقل‌فاصله‌ردیف
\mkern	\دوری‌ریاضی
\month	\ماه
\moveleft	\انتقال‌بچپ
\moveright	\انتقال‌براست
\mskip	\فاصله‌ریاضی
\m@th	\ری‌@‌ضی
\multicolumn	\چندستونی
\multiply	\ضرب
\multispan	\چندادغام
\muskip	\میوفاصله
\muskipdef	\تعريف‌میوفاصله
\@namedef	\@‌ترنام
\@nameuse	\@‌کاربردنام
\@ne	@\یک
\name	\نام
\natural	\طبیعی
\nearrow	\باریک
\nearrower	\باریکتر
\NeedsTeXFormat	\شکلبندی‌موردنیاز
\neg	\منفی
\negmedspace	\فضای‌متوسط‌منفی
\negthickspace	\فضای‌ضخیم‌منفی
\negthinspace	\دوری‌کوچک‌منفی
\newboolean	\بولی‌نو
\newbox	\کادر جدید
\newcommand	\فرمان‌نو
\newcount	\شمارجدید
\newcounter	\شمارنده‌جدید
\newdimen	\بعد‌جدید
\newenvironment	\محیط‌نو
\newfam	\خانواده‌جدید
\newfont	\قلم‌نو
\newhelp	\کمک‌جدید
\newif	\اگر‌جدید
\newinsert	\درج‌جدید
\newlabel	\برچسب‌جدید
\newlength	\تعريف‌بعد‌جدید
\newline	\اسطره‌جدید

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\newlinechar	\نویسه سطر جدید
\newmuskip	\میوفاصله جدید
\newpage	\صفحه جدید
\newread	\بخوان جدید
\newsavebox	\تعریف کادر جدید
\newskip	\فاصله جدید
\newtheorem	\قضیه جدید
\newtoks	\جزء جدید
\newwrite	\بنویس جدید
\noalign	\بیردیف
\nobreak	\نشکن
\nobreakspace	\فاصله نشکستنی
\nocite	\بدون سند
\noexpand	\انگستر
\nofiles	\بدون پرونده
\noindent	\بدون تورفتگی
\nointerlineskip	\بی فاصله سطر
\nolimits	\بدون حد
\nolinebreak	\سطر نشکن
\nonstopmode	\پردازش بدون توقف
\nonfrenchspacing	\فو اصل متعارف لاتین
\nonumber	\بدون شماره
\nopagebreak	\صفحه نشکن
\normalbaselines	\کرسی های متعارف
\normalbaselineskip	\فاصله کرسی متعارف
\normalcolor	\رنگ عادی
\normalfont	\قلم عادی
\normallineskip	\فاصله سطر متعارف
\normallineskiplimit	\حد فاصله سطر متعارف
\normalmarginpar	\در حاشیه عادی
\normalsize	\اندازه عادی
\notag	\بدون اتیکت
\null	\نول
\nullfont	\قلم تهی
\number	\عدد
\numberline	\سطر عددی
\numberwithin	\شماره مطابق
\@evenfoot	\پایین صفحه زوج
\@evenhead	\بالای صفحه زوج
\@oddfoot	\پایین صفحه فرد

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\@oddhead	\بالای صفحه فرد
\@outeqnttrue	\شماره بیرون درست
\@outeqnfase	\شماره بیرون نادرست
\obeylines	\سطر به سطر
\obeyspaces	\فضا فعال
\oddsidemargin	\حاشیه فرد
\offinterlineskip	\سطور بی فاصله
\omit	\حذف
\@onlypreamble	\@ تهادر پیش درآمد
\onecolumn	\یک ستون
\onlynotes	\اتهای اداداشت ها
\onlyslides	\اتهای اسلاید ها
\openin	\باز کن ورودی
\openout	\باز کن خروجی
\OptionNotUsed	\اگزینه مصرف نشده
\or	\یا
\outer	\برونی
\output	\صفحه بندی
\outputpenalty	\جریمه صفحه بندی
\overfullrule	\علامت سر بریز
\@preamblecmds	\@ فرمان های پیش درآمد
\p@	\پو
\PackageError	\خطای سبک
\PackageInfo	\اطلاع سبک
\PackageWarning	\هشدار سبک
\PackageWarningNoLine	\هشدار سبک بی سطر
\pagebreak	\صفحه شکن
\pagecolor	\رنگ صفحه
\pagedepth	\عمق صفحه
\pagefillstretch	\کشش پر ر صفحه
\pagefillstretch	\کشش پر ر صفحه
\pagefilstretch	\کشش پر صفحه
\pagegoal	\غاییت صفحه
\pagename	\نام صفحه
\pagenumbering	\شماره گذاری صفحه
\pageref	\رجوع صفحه
\pagerulewidth	\ضخامت خط صفحه
\pageshrink	\فشردگی صفحه
\pagestretch	\کشش صفحه
\pagestyle	\سبک صفحه

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\pagetotal	\جمع صفحه
\paperheight	\بلندای کاغذ
\paperwidth	\پهنای کاغذ
\par	\بند
\paragraph	\پاراگراف
\parallel	\موازی
\parbox	\کادر پار
\parfillskip	\فاصله ته بند
\parindent	\تورفتگی سر بند
\parsep	\فاصله بند لیست
\parshape	\شکل بند
\parskip	\فاصله بند
\part	\بخش
\partname	\عنوان بخش
\partopsep	\فاصله بالای لیست بند
\PassOptionToClass	\ارسال گزینه به کلاس
\PassOptionToPackage	\ارسال گزینه به پکیج
\path	\مسیر
\patterns	\الگوهای
\pausing	\مکث
\penalty	\جریمه
\phantom	\غیب
\poptabs	\الگوی قبلی
\postdisplaypenalty	\جریمه پس نمایش
\predisplaydirection	\جهت پیش نمایش
\predisplaypenalty	\جریمه پیش نمایش
\predisplaysize	\اندازه پیش نمایش
\pretolerance	\پیش حد بدنمایی
\prevdepth	\عمق قبلی
\prevgraf	\بند قبلی
\printindex	\نمایه در اینجا
\ProcessOptions	\پردازش گزینه ها
\protect	\تامین
\providecommand	\تهیه فرمان
\ProvidesClass	\آماده سازی طبقه
\ProvidesFile	\آماده سازی پرونده
\ProvidesPackage	\آماده سازی سبک
\pushtabs	\ثبت الگو
\quad	\کواد
\quad	\کوکواد

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\@outputpagerestore	\@بازآیی خروج صفحه
\radical	\رادیکال
\raggedbottom	\پایین بی تنظیم
\raggedleft	\تنظیم از راست
\raggedright	\تنظیم از چپ
\raise	\انتقال بالا
\raisebox	\بالابر
\raisetag	\ترفیع اتیکت
\rangle	\زاویه ر
\rceil	\سقف ر
\read	\بخوان
\ref	\رجوع
\reflectbox	\کادر قرینه
\refname	\عنوان مراجع
\refstepcounter	\گام شمارنده مرجع
\relax	\راحت
\removelastskip	\رفع آخرین فاصله
\renewcommand	\فرمان ازنو
\renewenvironment	\محیط ازنو
\repeat	\ازنو
\RequirePackage	\سیک موردنیاز
\RequirePackageWithOptions	\سیک موردنیاز با گزینه
\resizebox	\کادر کشیده
\reversemarginpar	\در حاشیه معکوس
\rfloor	\کفر
\right	\راست
\rightmargin	\حاشیه راست
\rightmark	\علامت راست
\rightpageskip	\کادر تاراست
\rightskip	\فاصله انتهای سطر
\rmdefault	\رومی عادی
\rmfamily	\فامیل رومی
\Roman	\رومی بزرگ
\roman	\رومی کوچک
\romannumeral	\عدد رومی
\rotatebox	\کادر چرخان
\rowcolor	\رنگ ردیف
\rule	\خط
\@secondoftwo	\دو می ازدو @\
\@spaces	\فضاهای @\

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\samepage	\همینصفحه
\savebox	\مقدارکادر
\sbox	\مقکادر
\scalebox	\کادراندازه
\scdefault	\پیشفرض تمام بزرگ
\scshape	\شکل تمام بزرگ
\scriptfont	\قلم توان
\scriptscriptfont	\قلم توان توان
\scriptscriptstyle	\سیک ته نوشت ته نوشت
\scriptsize	\اندازه پانویس
\scriptstyle	\سیک ته نوشت
\scrollmode	\پردازش گذری
\section	\قسمت
\secdef	\تعريف قسمت
\see	\بینید
\seealso	\نیز بینید
\seename	\نام بینید
\selectfont	\قلم بردار
\setboolean	\تنظیم بولی
\setbox	\در کادر
\setcounter	\مقدار شمارنده
\setkeys	\مقدار کلید ها
\setlength	\مقدار بعد
\setminus	\تنظيم منها
\SetSymbolFont	\تعريف قلم علامت
\settodepth	\تنظيم به عمق
\settoheight	\تنظيم به ارتفاع
\settowidth	\مقدار بعد به اندازه
\sfcode	\کد ضریب فاصله
\sfdefault	\پیشفرض سف
\sffamily	\فamil سن سریف
\shadowbox	\کادر رسایه دار
\sharp	\تیز
\shipout	\بفرست
\shortstack	\پشتہ کوتاه
\show	\نمایش بد
\showbox	\نمایش بد کادر
\showboxbreadth	\میزان نمایش کادر
\showboxdepth	\عمق نمایش کادر
\showlists	\نمایش بد لیستها

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\showthe	\نمایش بده محتوای
\simplefontmode	\حالت ساده قلم
\sixt@n	\شانزد @
\skewchar	\نویسه اریب
\skip	\فاصله
\skip@	@\فاصله
\skipdef	\تعريف فاصله
\sl	\خوابیده
\sldefault	\پیش فرض خو
\slshape	\شكل خوابیده
\sloppy	\راحت چین
\slshape	\شمایل خو
\small	\کوچک
\smallskip	\پیش کوتاه
\smallskipamount	\مقدار پیش کوتاه
\smash	\کوب
\smile	\الخند
\snglfntlocatecode	\اکد مکان همانطور
\space	\فضا
\spacefactor	\ضریب فاصله
\spaceskip	\فاصله کلمات
\spadesuit	\پیک
\span	\ادغام
\special	\ویرژه
\splitmaxdepth	\حداکثر عمق ستون
\splittopskip	\فاصله بالای ستون
\star	\ستاره
\stepcounter	\گام شمارنده
\stretch	\کشی
\string	\رشته
\strut	\شمع
\strutbox	\کادر شمع
\subitem	\زیر بند
\ subparagraph	\زیر پاراگراف
\subsection	\زیر قسمت
\substack	\زیر پیشه
\subsubitem	\زیر زیر بند
\subsubsection	\زیر زیر قسمت
\subset	\زیر مجموعه
\subsepeq	\زیر مجموعه مس

Continued on next page



Command in TeX or L ^A T _E X	Equivalent Persian Command
\supereject	\منتهايصفحه
\suppressfloats	\حذف مكان شناور
\@tempa	\موقت آ
\@tempb	\موقتب
\@tempc	\موقتب
\@tempd	\موقتب
\@tempe	\موقتب
\@tempboxa	\کادرقت آ
\@tempcnta	\شماقت آ
\@tempcntb	\شماقت ب
\@tempdim a	\بعدقت آ
\@tempdim b	\بعدقت ب
\@tempdim c	\بعدقت پ
\@tempskip a	\فاقت آ
\@tempskip b	\فاقت ب
\@tempswafalse	\سواقت آنادرست
\@tempswatrue	\سواقت آدرست
\temptokena	\جزقت آ
\thefnmark	\انگ زيرنويس
\thirdofthree	\سومي از سه
\tabbingsep	\فاصله جاگذاري
\tabcolsep	\فاصله بين ستونها
\tableofcontents	\فهرست مطالع
\tablename	\عنوان جدول
\tabskip	\فاصله ستونها
\tabularnewline	\ته سطر جدول
\tag	\اتيكت
\telephone	\تلفن
\TeX	\تك
\text	\امتن
\textbullet	\گلوله متنی
\textfont	\قلم متن
\textemdash	\ام دش متنی
\textendash	\ان دش متنی
\textexcldown	\تعجب وارونه متنی
\textperiodcentered	\ نقطه وسط متنی
\textquestiondown	\سؤال وارونه متنی
\textquotedblleft	\نقل چپ متنی دول
\textquotedblright	\نقل راست متنی دول
\textquotleft	\نقل متنی چپ

Continued on next page



Command in TeX or L ^A T _E X	Equivalent Persian Command
\textquoteright	\نقل متنی راست
\textvisiblespace	\فضای نمایان متنی
\textbackslash	\شکافت پشت متنی
\textbar	\میله متنی
\textgreater	\بزرگ تر متنی
\textless	\کمتر متنی
\textbf	\امن سیاه
\textcircled	\مدور متنی
\textcolor	\رنگ متن
\textcompwordmark	\نشان کلمه مرکب متن
\textfloatsep	\فاصله متن و شناور
\textfraction	\نسبت متن
\textheight	\بلندای متن
\textindent	\متن تورفته
\textit	\متن ایتالیک
\textmd	\متن نازک
\textnormal	\متن نرمال
\textregistered	\ثبتی متنی
\textrm	\متن رومان
\textsc	\متن تمام بزرگ
\textsf	\متن سن سریف
\textsl	\متن خوابیده
\textstyle	\سیک متنی
\textsuperscript	\بالانویس متنی
\texttrademark	\علامت تجاری متنی
\texttt	\متن تایپ
\textup	\متن ایستاده
\textwidth	\پهنهای متن
\thanks	\زیرنویس عنوان
\the	\محتوای
\thempfn	\این زیرنویس
\thicklines	\خط هاضخیم
\thickmuskip	\فاصله زیاد ریاضی
\thinmuskip	\فاصله کم ریاضی
\thickspace	\فضاضخیم
\thinlines	\خط هانازک
\thinspace	\دوری کوچک
\thisfancypage	\این صفحه تجملی
\thispagestyle	\سیک این صفحه
\thr@@	\@se\

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\tilde	\مد
\tiny	\ظریف
\time	\زمان
\times	\ضرب در
\title	\عنوان
\to	\به
\today	\امروز
\toks	\جزء
\toksdef	\تعریف جزء
\tolerance	\حد بند نمایی
\top	\بالا
\topfigrule	\خط بالای شناور
\topfraction	\نسبت بالا
\topmargin	\حاشیه بالا
\topmark	\علامت بالا
\topskip	\کادر تابلا
\topsep	\فاصله بالای لیست
\topskip	\فاصله بالا
\totalheight	\بلندای کل
\tracingall	\ردگیری کل
\tracingcommands	\ردگیری فرمان
\tracinglostchars	\ردگیری حروف
\tracingmacros	\ردگیری ماکروها
\tracingonline	\ردگیری نمایشی
\tracingoutput	\ردگیری صفحه بندی
\tracingpages	\ردگیری صفحات
\tracingparagraphs	\ردگیری بندها
\tracingrestores	\ردگیری بازگردانی
\tracingstats	\ردگیری آمارها
\triangle	\مثلث
\ttdefault	\پیش فرض تایپ
\ttfamily	\فamilی تایپ
\tw@	@دو
\twocolumn	\دو ستون
\typein	\در نویس
\typeout	\بر نویس
\uccode	\اکد بزرگ
\uchyph	\تیره بندی بزرگ
\undefined	\تعریف نشده
\underline	\زیر خط

Continued on next page



Command in TeX or L ^A T _E X	Equivalent Persian Command
\unhbox	\بی کادر
\unhcopy	\بی کپی
\unitlength	\ واحد طول
\unkern	\برگشت دوری
\unpenalty	\برگشت جریمه
\unskip	\برگشت فاصله
\unvbox	\بی کادر و
\unvcopy	\بی کپی و
\updefault	\پیش فرض ایستاده
\upshape	\شکل ایستاده
\usebox	\از کادر
\usecounter	\باشمارشگر
\usefont	\گزینش قلم
\usepackage	\سبک لازم
\@vobeyspaces	\فضاهای فعال
\@void	\@ تهی
\vadjust	\تنظیم و
\valign	\ردیف و
\value	\محتوای شمارنده
\vbadness	\بد نمایی و
\vbox	\کادر و
\vcenter	\کادر و سط
\verb	\همانطور
\vfil	\پرو
\vfill	\پر رو
\vfilneg	\رفع پر رو
\vfuzz	\پر زعمودی
\visible	\نمایان
\vline	\خط عمود
\voffset	\حاشیه و
\voidb@x	\ک در تهی
\vpageref	\ارجاع صفحه ع
\vrboxsep	\فاصله و گرد
\vref	\ارجاع
\rule	\خط و
\vspace	\طول صفحه
\vskip	\فاصله و
\vssplit	\فضای و
\vss	\شکست و
	\هر دو و

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\vtop	\کادرگود
\wd	\عرض
\whiledo	\مادام بکن
\widehat	\کلاه پهن
\widetilde	\مد پهن
\widowpenalty	\جریمه ته بند
\width	\پهنا
\wlog	\در کار نامه
\write	\بنویس
\@xobeysp	\فضای لاتین
\@xxxii	\اسی @ دو
\xdef	\ترجم
\xleaders	\نشانگر گسترشی
\xspaceskip	\فاصله اضافی کلمات
\year	\سال
\z@	\فر
\z@skip	\فرا فاصله

Table 2: The Equivalent XePersian Commands

Command in XePersian	Equivalent Persian Command
\autofootnoterule	\خط زیرنویس خودکار
\AutoMathsDigits	\اعداد فرمولها خودکار
\DefaultMathsDigits	\اعداد فرمولهای لاتین
\deflatinfont	\تعريف قلم لاتین
\defpersianfont	\تعريف قلم پارسی
\hboxL	\کادر اچ پ
\hboxR	\کادر است
\keyval@eq@alias@key	\معادل @ کلید
\Latincite	\مرجع لاتین
\latinfont	\قلم لاتین
\latintoday	\امروز لاتین
\leftfootnoterule	\خط زیرنویس چپ
\lr	\متن لاتین
\LRE	\چپ براست
\LTRdblcol	\دوسنونی چپ
\LTRfootnote	\پانویس
\LTRfootnotetext	\متن پانویس
\LTRthanks	\پانویس عنوان
\persianday	\روز پارسی
\persianfont	\قلم پارسی

Continued on next page



Command in XePersian	Equivalent Persian Command
\PersianMathsDigits	\اعداد فرمولها پارسی
\persianmonth	\ماه پارسی
\persianyear	\سال پارسی
\plq	\علامت چپ نقل قول پارسی
\prq	\علامت راست نقل قول پارسی
\rightfootnoterule	\خط زیرنویس راست
\rl	\متن پارسی
\RLE	\راست بچپ
\RTLdblcol	\دوستونی راست
\RTLfootnote	\پانوشت
\RTLfootnotetext	\متن پانوشت
\RTLthanks	\پانوشت عنوان
\@SepMark	\علامت بین
\SepMark	\علامت بین
\setdefaultbibitems	\بگذار مرجو عات عادی
\setdefaultmarginpar	\بگذار در حاشیه عادی
\setmathdigitfont	\گزینش قلم اعداد فرمولها
\setfootnoteLR	\بگذار زیرنویس چپ
\setfootnoteRL	\بگذار زیرنویس راست
\setlatintextfont	\گزینش قلم لاتین متن
\setLTR	\بگذار متن چپ
\setLTRbibitems	\بگذار مرجو عات چپ
\setLTRmarginpar	\بگذار در حاشیه چپ
\setRTL	\بگذار متن راست
\setRTLbibitems	\بگذار مرجو عات راست
\setRTLmarginpar	\بگذار در حاشیه راست
\settextfont	\گزینش قلم متن
\textwidthfootnoterule	\خط زیرنویس پنهانی متن
\twocolumnstableofcontents	\فهرست مطالب دوستونی
\unsetfootnoteRL	\نگذار زیرنویس راست
\unsetLTR	\نگذار متن چپ
\unsetRTL	\نگذار متن راست
\vboxL	\کادر واژ چپ
\vboxR	\کادر واژ راست
\XeLaTeX	\ازی لاتک
\XePersian	\ازی پرشین
\xepersianversion	\گونه زی پرشین
\xepersiandate	\تاریخ گونه زی پرشین
\XeTeX	\ازی تک

Table 3: The Equivalent LATEX Environments



Environment in L^AT_EX Equivalent Persian Environment

abstract	چکیده
appendix	پیوست
array	آرایه
center	وسط چین
description	توضیح
displaymath	ریاضی نمایشی
document	نوشتار
enumerate	شمارش
figure	شکل
figure*	*شکل
filecontents	محتوای پرونده
filecontents*	*محتوای پرونده*
flushleft	چپ چین
flushright	راست چین
itemize	فقرات
letter	نامه
list	لیست
longtable	جدول دراز
lrbox	کادر رج
math	ریاضی
matrix	ماتریس
minipage	صفحه کوچک
multicols	چند ستونی ها
multiline	چند خطی
note	یادداشت
overlay	ابداشت
picture	تصویر
quotation	اقتباس
quote	نقل
slide	اسلاید
sloppypar	پار نامرتب
split	شکافتن
subarray	زیر آرایه
tabbing	جاگذاری
table	لوح
table*	*لوح
tabular	جدول
tabular*	*جدول
thebibliography	مراجع
theindex	محتوای نمایه

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Environment in L ^A T _E X	Equivalent Persian Environment
<code>titlepage</code>	صفحه عنوان
<code>trivlist</code>	لیست بدوی
<code>verbatim</code>	همانطور که هست
<code>verbatim*</code>	همانطور که هست*
<code>verse</code>	شعر

Table 4: The Equivalent XePersian Environments

Environment in XePersian	Equivalent Persian Environment
<code>latin</code>	لاتین
<code>LTR</code>	متن چپ
<code>LTRItems</code>	دسته‌بندی چپ
<code>persian</code>	پارسی
<code>RTL</code>	متن راست
<code>RTLItems</code>	دسته‌بندی راست

Localisation of position arguments. Some environments like `tabular` and some commands like `\parbox` have an argument which specifies the position. Table [Table 5](#) shows their localisations.

Table 5: The Equivalent L^AT_EX position arguments

Position argument in L ^A T _E X	Equivalent Persian position argument
<code>b</code>	ز
<code>c</code>	و
<code>C</code>	س
<code>h</code>	ا
<code>H</code>	آ
<code>J</code>	ت
<code>l</code>	ج
<code>L</code>	ف
<code>m</code>	م
<code>p</code>	پ
<code>P</code>	ص
<code>r</code>	ر
<code>R</code>	ا
<code>s</code>	ک
<code>t</code>	ب

☞ There are two ps in [Table 5](#), first p and its Persian equivalent پ stand for paragraph (used in `tabular` and similar environments) and the second p and its Persian equivalent ص stand for page (used in float-like environments).



2.4.8 Localizations of the keys and key values of `graphicx` package

The equivalent Persian keys and key values of `graphicx` package is shown in [Table 6](#) and [Table 7](#) respectively.

Table 6: Persian Equivalent keys of `graphicx` package

Original Key	Equivalent Persian Key
<code>draft</code>	پیش‌نویس
<code>origin</code>	مبدأ
<code>clip</code>	بی‌اضافه
<code>keepaspectratio</code>	حفظ تناسب
<code>natwidth</code>	پهناهی طبیعی
<code>natheight</code>	بلندای طبیعی
<code>bb</code>	مختصات
<code>viewport</code>	محدوده نمایش
<code>trim</code>	حذف اطراف
<code>angle</code>	زاویه
<code>width</code>	پهنا
<code>height</code>	بلند
<code>totalheight</code>	بلندای کل
<code>scale</code>	ضریب
<code>type</code>	نوع
<code>ext</code>	پسوند
<code>read</code>	خواندنی
<code>command</code>	فرمان
<code>x</code>	طول
<code>y</code>	عرض
<code>units</code>	واحد

Table 7: Persian Equivalent key values of `graphicx` package

Original Key value	Equivalent Persian Key value
<code>b</code>	ز
<code>B</code>	ک
<code>false</code>	نادرست
<code>l</code>	ج
<code>r</code>	ر
<code>t</code>	ب
<code>true</code>	درست

2.4.9 Localizations of font features and font feature options

The equivalent Persian font features and font feature options is shown in [Table 8](#) and [Table 9](#) respectively.

Table 8: Persian Equivalent font features



Original font feature	Equivalent Persian font feature
ExternalLocation	مکان خارجی
ExternalLocation	مسیر
Renderer	تحویل دهنده
BoldFont	قلم سیاه
Language	زبان
Script	خط
UprightFont	قلم عمودی
ItalicFont	قلم ایتالیک
BoldItalicFont	قلم ایتالیک سیاه
SlantedFont	قلم خوابیده
BoldSlantedFont	قلم خوابیده سیاه
SmallCapsFont	قلم کلاه کوچک
UprightFeatures	ویژگی های قلم عمودی
BoldFeatures	ویژگی های قلم سیاه
ItalicFeatures	ویژگی های قلم ایتالیک
BoldItalicFeatures	ویژگی های قلم ایتالیک سیاه
SlantedFeatures	ویژگی های قلم خوابیده
BoldSlantedFeatures	ویژگی های قلم خوابیده سیاه
SmallCapsFeatures	ویژگی های قلم کلاه کوچک
SizeFeatures	ویژگی های اندازه
Scale	ضریب
WordSpace	فضای کلمه
PunctuationSpace	فضای نقطه گذاری
FontAdjustment	تنظیم قلم
LetterSpace	فضای حرف
HyphenChar	نویسه تیره
Color	رنگ
Opacity	کدری
Mapping	نگاشت
Weight	سنگینی
Width	پهنا
OpticalSize	اندازه چشمی
FakeSlant	خوابیده تقلیبی
FakeStretch	کشش تقلیبی
FakeBold	سیاه تقلیبی
AutoFakeSlant	خوابیده تقلیبی خودکار
AutoFakeBold	سیاه تقلیبی خودکار
Ligatures	دویاچند حرف متصل به هم
Alternate	متناوب
Variant	گوناگون

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Original font feature	Equivalent Persian font feature
Variant	مجموعه سبکی
CharacterVariant	گوناگونی نویسه
Style	سبک
Annotation	بادداشت
RawFeature	ویرگی های کال
CharacterWidth	پهنا نویسه
Numbers	ارقام
Contextuals	متخی
Diacritics	تفکیک کنندگان
Letters	حروف
Kerning	دوری
VerticalPosition	موقعیت عمودی
Fractions	کسر

Table 9: Persian Equivalent font feature options

font feature	font feature option	Persian font feature option
Language	Default	پیش فرض
Language	Parsi	پارسی
Script	Parsi	پارسی
Script	Latin	لاتین
Style	MathScript	اسکریپت ریاضی
Style	MathScriptScript	اسکریپت اسکریپت ریاضی

2.5 A Sample Input TeX File

```

1 \documentclass{article}
2 \usepackage{xepersian}
3 \settextfont[XB Niloofer]
4 \title{یک سند نمونه}
5 \author{نام نویسنده}
6 \begin{document}
7 \maketitle
8 \tableofcontents
9 \part{عنوان بخش}
10 ...
11 \section{عنوان قسمت}
12 ...
13 \subsection{عنوان زیرقسمت}
14 ...
15 \subsubsection{عنوان زیر زیرقسمت}
16 ...
17 \end{document}

```

2.6 Font Commands



2.6.1 Basic Font Commands

```
\settextfont [Options] {<font name>}  
\setlatintextfont [Options] {<font name>}  
\setmathdigitfont [Options] {<font name>}  
\setmathsf digitfont [Options] {<font name>}  
\setmathtt digitfont [Options] {<font name>}
```

- ☞ Options in any font command in this documentation are anything that `fontspec` package provides as the option of loading fonts, except `Script` and `Mapping`.
- ☞ `\settextfont` will choose the default font for Persian texts of your document.
- ☞ `\setlatintextfont` will choose the font for Latin texts of your document. If you do not use this command at all, the default T_EX font (fonts used in this documentation) will be used for Latin texts of your document.
- ☞ `\setmathdigitfont` will choose the Persian font for digits in math mode. By default, digits in math mode will appear in Persian form.
- ☞ `\setmathsf digitfont` will choose the Persian font for digits in math mode inside `\mathsf`. By using this command, digits in math mode inside `\mathsf` will appear in Persian form and if you do not use this command at all, you will get default T_EX font for digits in math mode inside `\mathsf` and digits appear in their original form (Western).
- ☞ `\setmathtt digitfont` will choose the Persian font for digits in math mode inside `\mathtt`. By using this command, digits in math mode inside `\mathtt` will appear in Persian form and if you do not use this command at all, you will get default T_EX font for digits in math mode inside `\mathtt` and digits appear in their original form (Western).

2.6.2 Defining Extra Persian and Latin Fonts

```
\defpersianfont\CS [Options] {<font name>}  
\deflatinfont\CS [Options] {<font name>}
```

- ☞ With `\defpersianfont`, you can define extra Persian fonts.

```
\defpersianfont\Nastaliq[Scale=1]{IranNastaliq}
```

In this example, we define `\Nastaliq` to stand for IranNastaliq font.

- ☞ With `\deflatinfont`, you can define extra Latin fonts.



```
\deflatinfont\junicode[Scale=1]{Junicode}
```

In this example, we define `\junicode` to stand for Junicode font.

2.6.3 Choosing Persian Sans Font

```
\setpersiansansfont [Options] {<font name>}  
\persiansffamily \textpersiansf{<text>}
```

2.6.4 Choosing Persian Mono Font

```
\setpersianmonofont [Options] {<font name>}  
\persianttfamily \textpersiantt{<text>}
```

2.6.5 Choosing Persian Iranic Font

```
\setiranicfont [Options] {<font name>}  
\iranicfamily \textiranic{<text>}
```

2.6.6 Choosing Persian Navar Font

```
\setnavarfont [Options] {<font name>}  
\navarfamilly \textnavar{<text>}
```

2.6.7 Choosing Persian Pook Font

```
\setpookfont [Options] {<font name>}  
\pookfamily \textpook{<text>}
```

2.6.8 Choosing Persian Sayeh Font

```
\setsayehfont [Options] {<font name>}  
\sayehfamily \textsayeh{<text>}
```

2.6.9 Choosing Latin Sans Font

```
\setlatinsansfont [Options] {<font name>}  
\sffamily \textsf{<text>}
```

2.6.10 Choosing Latin Mono Font

```
\setlatinmonofont [Options] {<font name>}  
\ttfamily \texttt{<text>}
```



3 Latin and Persian Environment

```
\begin{latin} <text> \end{latin}
\begin{persian} <text> \end{persian}
```

☞ `latin` environment both changes direction of the paragraphs to LTR and font to Latin font.

☞ `persian` environment both changes direction of the Paragraphs to RTL and font to Persian font.

3.1 latinitems and parsiitems environments

```
\begin{latinitems}
\item <text>
...
\end{latinitems}
```

☞ `latinitems` environment is similar to `LTRitems` environment but changes the font to Latin font.

```
\begin{parsiitems}
\item <text>
...
\end{parsiitems}
```

☞ `parsiitems` environment is similar to `RTLitems` environment but changes the font to Persian font.

3.2 Short Latin and Persian Texts

```
\lr{<text>} \rl{<text>}
```

☞ With `\lr` command, you can typeset short LTR texts.

☞ With `\rl` command, you can typeset short RTL texts.

3.3 Miscellaneous Commands

```
\persianyear \persianmonth \persianday
\today \latintoday \twocolumnstableofcontents \XePersian
\plq \prq
```

☞ `\persianyear` is Persian equivalent of `\year`.

☞ `\persianmonth` is Persian equivalent of `\month`.



- ☞ \persianday is Persian equivalent of \day.
- ☞ \today typesets current Persian date and \latintoday typesets current Latin date.
- ☞ \twocolumnstableofcontents typesets table of contents in two columns. This requires that you have loaded multicol package before XePersian package, otherwise an error will be issued.
- ☞ \XePersian typesets XePersian's logo.
- ☞ \plq and \prq typeset Persian left quote and Persian right quote respectively.

3.4 New Commands

\Latincite

- ☞ \Latincite functions exactly like \cite command with only one difference; the reference to biblabel item is printed in Latin font in the text.

3.5 Additional Counters

XePersian defines several additional counters to what already L^AT_EX offers. These counters are **harfi**, **adadi**, and **tartibi**. In addition, the following commands are also provided:

\harfinumeral{\langle integer\rangle} \adadinumeral{\langle integer\rangle} \tartibinumeral{\langle integer\rangle}

- ☞ The range of **harfi** counter is integers between 1 and 32 (number of the Persian alphabets) and **adadi** and **tartibi** counters, are integers between 0 and 999,999,999.
- ☞ For **harfi** counter, if you give an integer bigger than 32 or a negative integer (if you give integer 0, it returns nothing), then you get error and for **adadi** and **tartibi** counters, if you give an integer bigger than 999,999,999, then you get an error message.
- ☞ For **adadi** and **tartibi** counters, if you give an integer less than 0 (a negative integer), then **adadi** and **tartibi** counters return **adadi** and **tartibi** form of the integer 0, respectively.
- ☞ \harfinumeral returns the **harfi** form of $\langle integer \rangle$, where $1 \leq integer \leq 32$ and \adadinumeral, and \tartibinumeral return **adadi**, and **tartibi** form of $\langle integer \rangle$ respectively, where $0 \leq integer \leq 999,999,999$.



3.6 Things To Know About `\setmathdigitfont`, `\setmathsf digitfont`, and `\setmathtt digitfont`

```
\DefaultMathsDigits \PersianMathsDigits \AutoMathsDigits
```

- ☞ As we discussed before, `\setmathdigitfont` will choose the Persian font for digits in math mode. By default, digits in math mode will appear in Persian form.
- ☞ As we discussed before, `\setmathsf digitfont`, and `\setmathtt digitfont` will choose the Persian sans serif and typewriter fonts for digits in math mode. By using this command, digits in math mode will appear in Persian form and if you do not use this command at all, you will get default TeX font for digits in math mode and digits appear in their original form (Western).

If you use `\setmathdigitfont`, `\setmathsf digitfont`, and `\setmathtt digitfont`, then you should know that:

- ☞ By default, `\AutoMathsDigits` is active, which means that in Persian mode, you get Persian digits in math mode and in Latin mode, you get TeX's default font and digits in math mode.
- ☞ If you use `\PersianMathsDigits` anywhere, you will overwrite XePersian's default behaviour and you will always get Persian digits in math mode.
- ☞ If you use `\DefaultMathsDigits` anywhere, again you will overwrite XePersian's default behaviour and you will always get TeX's default font and digits in math mode.

4 New Conditionals

4.1 Shell escape (or write18) conditional

```
\ifwritexviii
  <material when Shell escape (or write18) is enabled>
\else
  <material when Shell escape (or write18) is not enabled>
\fi
```

5 Bilingual Captions

XePersian sets caption bilingually. This means if you are in RTL mode, you get Persian caption and if you are in LTR mode, you get English caption.



5.1 Support For Various Packages

In addition to what `bidi` package supports, XePersian also support a few packages. This support is more about language aspect rather than directionality. These packages are `algorithmic`, `algorithm`, `enumerate`, and `backref` packages.

5.1.1 Things You Should Know about Support For `enumerate` Package

The `enumerate` package gives the `enumerate` environment an optional argument which determines the style in which the counter is printed.

An occurrence of one of the tokens `A`, `a`, `I`, `i`, or `1` produces the value of the counter printed with (respectively) `\Alpha`, `\alpha`, `\Roman`, `\roman` or `\arabic`.

In addition with the extra support that XePersian provides, an occurrence of one of the tokens `l`, `ş`, or `č` produces the value of the counter printed with (respectively) `\harfi`, `\adadi`, or `\tartibi`.

These letters may be surrounded by any strings involving any other TeX expressions, however the tokens `A`, `a`, `I`, `i`, `1`, `l`, `ş`, `č` must be inside a {} group if they are not to be taken as special.

To see an Example, please look at `enumerate` package documentation.

5.2 Index Generation

For generating index, you are advised to use `xindy` program, any other program such as `makeindex` is not recommended.

5.3 Converting Your FarsiTeX Files To XePersian or Unicode

There is a python program written by Mostafa Vahedi that enables you to convert FarsiTeX files to XePersian or unicode. This program can be found in `doc` folder with the name `ftxe-0.12.py`. To convert your FarsiTeX files to XePersian, put `ftxe-0.12.py` in the same directory that your FarsiTeX file is, and then open a terminal/command prompt and do the following:

```
python ftxe-0.12.py file.ftx file.tex
```

This will convert your `file.ftx` (FarsiTeX file) to `file.tex` (XePersian file). The general syntax of using the python script is as follow:

```
python ftxe-0.12.py [-r] [-s] [-x] [-u] input-filename1 input-filename2
```

Where

`-r` (DEFAULT) recursively consider files included in the given files

`-s` do not recursively consider files



-x (DEFAULT) insert XePersian related commands

-u only convert to unicode (and not to XePersian)

Please note that the python script will not work with versions of python later than 2.6. So you are encouraged to use version 2.6 of python to benefit from this python script.

6 Extra Packages And Classes

6.1 Magazine Typesetting

6.1.1 Introduction

`xepersian-magazine` class allows you to create magazines, newspapers and any other types of papers. The output document has a front page and as many inner pages as desired. Articles appear one after another, telling the type, number of columns, heading, subheading, images, author and so forth. It is possible to change the aspect of (almost) everything therefore it is highly customisable. Commands to add different titles, headings and footers are also provided.

6.1.2 Usage

To create² a magazine just load the class as usual³, with

```
\documentclass [Options] {xepersian-magazine}
```

at the beginning of your source file. The class options are described in [subsubsection 6.1.12](#).

From this point it is possible to include packages and renew class commands described in [subsubsection 6.1.9](#).

6.1.3 Front Page

As every magazine, `xepersian-magazine` has its own front page. It includes main headings, an index, the magazine logo and other useful information. This environment should be the first you use within `xepersian-magazine` class but it is not mandatory.

```
\firstimage \firstarticle
```

The first two commands you can use inside the `frontpage` environment are `\firstimage` and `\firstarticle` which include, respectively, the main image and

²For a sample file, please look at `magazine-sample.tex` in the `doc` folder

³You also need to load `graphicx`, `xunicode` and `xepersian` packages respectively, after loading the document class and choose fonts for the main text, Latin text and digits in maths formulas. For more detail see [section 2](#) of the documentation.



the main heading in the front page. The first one takes two arguments $\langle image \rangle$ and $\langle description \rangle$. Notice that second argument is optional and it declares the image caption; $\langle image \rangle$ defines the relative path to the image. In order to include the first piece of article use

```
\firstarticle{\langle title \rangle}{\langle opening \rangle}{\langle time \rangle}
```

first two arguments are mandatory and represent heading and the opening paragraph. Last argument is optional (you can leave it blank) and indicates the time when article happened.

```
\secondarticle
```

The second piece of article is included using the command `\secondarticle` just as the first article. The main difference are that this second piece has two more arguments and it does not include an image.

```
\secondarticle{\langle title \rangle}{\langle subtitle \rangle}{\langle opening \rangle}{\langle pagesof \rangle}{\langle time \rangle}
```

The new arguments $\langle subtitle \rangle$ and $\langle pagesof \rangle$ define a subtitle and the name of the section for this piece of article.

```
\thirdarticle
```

The third piece of article is the last one in the `xepersian-magazine` front page. It works like the `\secondarticle`.

```
\thirdarticle{\langle title \rangle}{\langle subtitle \rangle}{\langle opening \rangle}{\langle pagesof \rangle}{\langle time \rangle}
```

The arguments meaning is the same as `\secondarticle` command.

The front page includes three information blocks besides the news: `indexblock` which contains the index, `authorblock` which includes information about the author and a `weatherblock` containing a weather forecast. All these three environments are mostly a frame in the front page therefore they can be redefined to fit your personal wishes but I kept them to give an example and to respec the original `xepersian-magazine` format.

```
\indexitem
```

The `indexblock` environment contains a manually editted index of `xepersian-magazine`. It takes one optional argument $\langle title \rangle$ and places a title over the index block. To add entries inside the index just type



```
\indexitem{\langle title\rangle}{\langle reference\rangle}
```

inside the environment. The *\langle title\rangle* is the index entry text and the *\langle reference\rangle* points to a article inside `xepersian-magazine`. It will be more clear when you read [subsubsection 6.1.4](#). In order to get a correct output, it is necessary to leave a blank line between index items.

The `authorblock` environment can include whatever you would like. I called it `authorblock` because I think it is nice to include some author reference in the front page: who you are, why are you doing this... This environment creates a frame box in the bottom right corner of the front page with your own logo at the top.

```
\weatheritem
```

Finally, the `weatherblock` lets you include a weather forecast. It takes one optional argument *\langle title\rangle* that places a title over the weather block. It can fit up to three weather icons with maximum and minimum temperatures, description and name. To add each of the weather entries type the following

```
\weatheritem{\langle image\rangle}{\langle day-name\rangle}{\langle max\rangle}{\langle min\rangle}{\langle short-des\rangle}
```

The first argument includes the path to the weather icon (i.e. sunny or rainy), *\langle day-name\rangle* like Monday, *\langle max\rangle* and *\langle min\rangle* are the highest and lowest day temperatures and *\langle short-des\rangle* is a brief description of the weather condition: partly cloudy, sunny and windy ...

6.1.4 Inside

Once we have created the front page we should include all articles inside our magazine. `xepersian-magazine` arranges all articles one after each other, expanding headings all over the page and splitting the article text in the number of columns we wish. There are three different environments to define a piece of article: the `article` environment described in [subsubsection 6.1.5](#), the `editorial` environment [subsubsection 6.1.6](#) for opinion articles and the `shortarticle` environment explained in [subsubsection 6.1.7](#).

6.1.5 The article environment

The main environment to include a piece of article is called `article`. It takes four arguments that set up the headings and structure of the article.



```
\begin{article}{<num-of-columns>}{<title>}{<subtitle>}{<pagesof>}{<label>}
...<text>...
\end{article}
```

The first argument *<num-of-columns>* sets the number of columns the article will be divided whereas *<label>* is used when pointing an article from the index in the front page. The rest of the arguments are easy to understand.

Inside the `article` environment, besides the main text of the article, it is possible to include additional information using several class commands.

```
\authorandplace \timestamp
```

The `\authorandplace{<author>}{<place>}` inserts the name of the editor and the place where the article happened in the way many magazines do. Another useful command is `\timestamp{<time>}` which includes the time and a separator just before the text. These two commands should be used before the text because they type the text as the same place they are executed.

```
\image
```

To include images within the text of an article, `xepersian-magazine` provides an `\image` command. Since `multicol` package does not provide any float support for its `multicols` environment, I created a macro that includes an image only if that is possible, calculating if there is enough space for the image. It is not the best solution but it works quite well and I could not find a better one. To include an image use the command and its two arguments: the relative path to the image and a short description.

```
\image{<image>}{<description>}
```

```
\columntitle \expandedtitle
```

Within the text of the article, it is possible to add column and expanded titles. The main difference between them is that the first one keeps inside the width of an article column whereas the second expands all over the width of the page, breaking all the columns. Their use is analogous, as follows

```
\columntitle{<type>}{<text>}
\expandedtitle{<type>}{<text>}
```

These two commands use `fancybox` package features. That is why there are five different types of titles which correspond mainly with `fancybox` ones: `shadowbox`, `doublebox`, `ovalbox`, `Ovalbox` and `lines`.



6.1.6 The editorial environment

In addition to the editorial article environment, one can use the editorial environment to create editorial or opinion texts. The main feature is that it transforms the style of the heading. Although this environment accepts all the commands article takes, it does not make any sense to use the `\authorandplace` command within it since it includes an author argument. To create an editorial text use

```
\begin{editorial}{\num-of-columns}{\title}{\author}{\label}
...{\text}...
\end{editorial}
```

All arguments have the same meaning as article environment (see [subsubsection 6.1.5](#)).

6.1.7 The shortarticle environment

The shortarticle environment creates a block of short article. Although it has its own title and subtitle, each piece of article within it may have a title. To use it just type:

```
\begin{shortarticle}{\num-of-columns}{\title}{\subtitle}{\label}
...{\text}...
\shortarticleitem{\title}{\text}
...
\end{shortarticle}
```

You can also specify the number of columns of the block like editorial and article environments. To add a piece of article inside the shortarticle use the `\shortarticleitem`, indicating a title and the text of the issue.

6.1.8 Commands between articles

```
\articlesep \newsection
```

There are two commands you can use among the articles inside `xepersian-magazine`: `\articlesep` and `\newsection`. The first one does not take any parameter and just draws a line between two articles. The second changes the content of `\xepersian@section` to the new `\langle section name \rangle`. From the point it is used, all articles which follow will be grouped within the new section.

```
\newsection{\langle section name \rangle}
```

6.1.9 Customization

`xepersian-magazine` includes many commands which can be used to customize its aspect, from the front page to the last page. I will list them grouped so it is easy



to find them. Treat them as standard L^AT_EX commands, using `\renewcommand` to change their behaviour.

6.1.10 Front Page

```
\customlogo \customminilogo \custommagazinename
```

When creating a magazine, everyone wants to show its own logo instead of `xepersian-magazine` default heading. To achieve this, you need to put the following command at the preamble of your document:

```
\customlogo{\text{}}\customminilogo{\text{}}\custommagazinename{\text{}}
```

```
\edition \editionformat
```

The edition text has to be declared in the preamble of the document. One important thing to know is that `\author`, `\date` and `\title` have no effect inside `xepersian-magazine` since the magazine date is taken from `\today` command and the other two are only for the title page (if using `\maketitle`).

```
\indexFormat \indexEntryFormat \indexEntryPageTxt  
\indexEntryPageFormat \indexEntrySeparator
```

When defining the index in the front page, there are several commands to customize the final index style. `\indexFormat` sets the format of the title; `\indexEntryFormat`, the format of each index entry; `\indexEntryPageTxt` and `\indexEntryPageFormat` lets you define which is the text that goes with the page number and its format. Finally, `xepersian-magazine` creates a thin line between index entries, you can redefine it using `\indexEntrySeparator`. To get the index with `\xepersian@indexwidth` is provided.

```
\weatherFormat \weatherTempFormat \weatherUnits
```

Relating to the weather block, the title format can be changed redefining `\weatherFormat`. In order to customize the format of the temperature numbers and their units it is necessary to redefine `\weatherTempFormat` and `\weatherUnits` respectively.

```
\*TitleFormat \*SubtitleFormat \*TextFormat
```

The main article that appear in the front page can change their formats. To obtain that there are three standard commands to modify the title, subtitle and text style. You just have to replace the star (*) with first, second or third depending on which article you are editing. Note that first piece of article has no



subtitle therefore it does not make any sense to use the non-existent command `\firstSubtitleFormat`.

```
\pictureCaptionFormat \pagesFormat
```

Two other elements to configure are the picture captions and the pages or section format in the entire document. To proceed just redefine the macros `\pictureCaptionFormat` and `\pagesFormat`.

6.1.11 Inside The Magazine

```
\innerTitleFormat \innerSubtitleFormat \innerAuthorFormat  
\innerPlaceFormat
```

The articles inside `xepersian-magazine` may have a different format from the ones in the front page. To change their title or subtitle format redefine `\innerTitleFormat` and `\innerSubtitleFormat`. The article text format matches the document general definition. When using the `\authorandplace` command, you might want to change the default style. Just renew `\innerAuthorFormat` and `\innerPlaceFormat` to get the results.

```
\timestampTxt \timestampSeparator \timestampFormat
```

The `\timestamp` command described in [subsubsection 6.1.5](#) lets you introduce the time of the event before the article text. You can configure its appearance by altering several commands: `\timestampTxt` which means the text after the timestamp; `\timestampSeparator` which defines the element between the actual timestamp and the beginning of the text and, finally, `\timestampFormat` to change the entire timestamp format.

```
\innerTextFinalMark
```

`xepersian-magazine` puts a small black square at the end of the article. As I wanted to create a highly customizable L^AT_EX class I added the macro `\innerTextFinalMark` to change this black square. This item will appear always following the last character of the text with the~ character.

```
\minraggedcols \raggedFormat
```

The `\minraggedcols` counter is used to tell `xepersian-magazine` when article text should be ragged instead of justified. The counter represents the minimum number of columns that are needed in order to use ragged texts. For example, if `\minraggedcols` is set to 3, all articles with 3 columns or more will be ragged. Articles with 1, 2 columns will have justified text. By default, `\minraggedcols` is set to 4.



The `\raggedFormat` macro can be redefined to fit user ragged style. Default value is `\RaggedLeft`.

```
\heading \foot
```

`xepersian-magazine` includes package `fancyhdr` for changing headings and footers. Although it is possible to use its own commands to modify `xepersian-magazine` style, there are two commands to change headings and foot appearance. Place them in the preamble of your `xepersian-magazine` document.

```
\heading{\{left\}\{center\}\{right\}}
\foot{\{left\}\{center\}\{right\}}
```

If you still prefer to use `fancyhdr` macros, use them after the `frontpage` environment.

`xepersian-magazine` by default places no headers and footers. If you want headers and footers, then after loading `xepersian` package, you should write `\pagestyle{fancy}` at the preamble of your document.

6.1.12 Class Options

The `xepersian-magazine` class is in itself an alteration of the standard `article` class, thus it inherits most of its class options but `twoside`, `twocolumn`, `notitlepage` and `a4paper`. If you find problems when loading other article features, please let me know to fix it. There are also five own options that `xepersian-magazine` implements.

a3paper (false) This option makes `xepersian-magazine` 297 mm width by 420 mm height. This option is implemented because the standard `article` class does not allow this document size.

9pt (false) Allows the 9pt font size that `article` class does not include (default is 10pt).

columnlines columnlines (false) Adds lines between columns in the entire `xepersian-magazine`. The default line width is 0.1pt but it is possible to change this by setting length `\columnlines` in the preamble.

showgrid (false) This option is only for developing purposes. Because the front page has a personal design using the `textpos` package, I created this grid to make easier the lay out.

6.2 Typesetting Multiple-choice Questions

6.2.1 Introduction

`xepersian-multiplechoice` is a package for making multiple choices questionnaires under L^AT_EX. A special environment allows you to define questions and possible



answers. You can specify which answers are correct and which are not. `xepersian-multiplechoice` not only formats the questions for you, but also generates a “form” (a grid that your students will have to fill in), and a “mask” (the same grid, only with correct answers properly checked in). You can then print the mask on a slide and correct the questionnaires more easily by superimposing the mask on top of students’ forms.

6.2.2 Usage

Here we now explain the usage of this package, however there are four example files, namely `test-question-only.tex`, `test-solution-form.tex`, `test-empty-form.tex` and `test-correction.tex`, available in `doc` folder that you may want to look at.

6.2.3 Loading The Package

You can load the package as usual by:

```
\usepackage [Options] {xepersian-multiplechoice}
```

The available options are described along the text, where appropriate.

6.2.4 Creating Questions

Here’s a simple example demonstrating how to produce a new question:

```
1 \begin{question}{سؤال}
2 \false ١ جواب
3 \true ٢ جواب
4 \false ٣ جواب
5 \false ٤ جواب
6 \end{question}
7 \begin{correction}
8 جواب واقعی و علت اینکه این جواب، جواب واقعی هست
9 \end{correction}
```

6.2.5 The question Environment

The `question` environment allows you to insert questions into your document. It takes one mandatory argument which specifies the actual question’s text. The question will be displayed in a frame box, the size of the line.

```
\true \false
```

The proposed answers are displayed below the question in a list fashion (the question environment is a list-based one). Instead of using `\item` however, use either `\true` or `\false` to insert a possible answer.



6.2.6 Question Numbers

The `question` environment is associated with a L^AT_EX counter named `question`. This counter stores the number of the next (or current) question. It is initialized to 1, and automatically incremented at the end of `question` environments. You might want to use it to format question titles. For instance, you could decide that each question belongs to a subsection in the `article` class, and use something like this before each question: `\subsection*{Question \thequestion}`

6.2.7 The Form and the Mask

```
\makeform \makemask
```

Based on the questions appearing in your document, `xepersian-multiplechoice` has the ability to generate a “form” (a grid that your students will have to fill in), and a “mask” (the same grid, only with correct answers properly checked in). This can make the correction process easier.

To generate a form and a mask, use the macros `\makeform` and `\makemask`. `xepersian-multiplechoice` uses two auxiliary files to build them. These files have respectively an extension of `frm` and `msk`. If you use these macros, you will need two passes of L^AT_EX in order to get a correctly formatted document.

6.2.8 Typesetting corrections

The “correction” mode allows you to automatically typeset and distribute corrections to your students. These corrections are slightly modified versions of your questionnaire: each possible answer is prefixed with a small symbol (a visual clue) indicating whether the answer was correct or wrong. In addition, you can typeset explanations below each question.

To activate the correction mode, use the `correction` option. It is off by default. To typeset explanations below the questions, use the `correction` environment (no argument). The contents of this environment is displayed only in correction mode. In normal mode, it is simply discarded.

In addition, note that `xepersian-multiplechoice` cancels the actions performed by `\makeform` and `\makemask` in `correction` mode. This is to avoid further edition of the source when typesetting a correction.

6.2.9 Important Note

Currently, `xepersian-multiplechoice` requires that you provide a constant number of proposed answers across all questions in your `xepersian-multiplechoice`. This is something natural when you want to build forms, but this might me too restrictive otherwise, I’m not sure, so it is possible that this restriction will be removed in future versions.

Currently, there is a built-in mechanism for checking that the number of proposed answers remains constant: when `xepersian-multiplechoice` encounters the first occurrence of the `question` environment, it remembers the number of proposed answers



from there. Afterwards, any noticed difference in subsequent occurrences will generate an error. As a consequence, you never have to tell `xpersian-multiplechoice` explicitly what that number is.

6.3 Customising The Package

6.3.1 The question environment

```
\questionspace \answerstitlefont \answernumberfont
```

`\questionspace` is the amount of extra vertical space to put under the question, before the list of proposed answers. This is a L^AT_EX length that defaults to `0pt`. Before the list of possible answers, a short title is displayed (for English, it reads “Possible answers:”). The `\answerstitlefont` macro takes one mandatory argument which redefines the font to use for the answers title. By default, `\bfseries` is used.

Each proposed answer in the list is numbered automatically (and alphabetically). The `\answernumberfont` macro takes one mandatory argument which redefines the font to use for displaying the answer number. By default, `\bfseries` is used.

6.3.2 The Form and the Mask

```
\headerfont \X
```

The `\headerfont` macro takes one mandatory argument which redefines the font to use for the headers (first line and first column) of the form and mask arrays. By default, `\bfseries` is used.

In the mask, correct answers are checked in by filling the corresponding cell with an “X” character. If you want to change this, call the `\X` macro with one (mandatory) argument.

6.3.3 The correction

```
\truesymbol \falsesymbol
```

In correction mode, labels in front of answers are modified to give a visual clue about whether the answer was correct or wrong. By default, a cross and a small arrow are used. You can change these symbols by using the `\truesymbol` and `\falsesymbol` macros. For instance, you could give a fancier look to your correction by using the `pifont` package and issuing:

```
\truesymbol{\ding{'063}~}
\falsesymbol{\ding{'067}~}
```



```
\correctionstyle
```

The appearance of the contents of the correction environment can be adjusted by using the `\correctionstyle` macro. By default, `\itshape` is used.

