

The XePersian Package



Persian for L^AT_EX 2_E over XeT_EX

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1 Introduction

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

1.1 Important Notes

 The XePersian package only works with Xe \TeX 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, I no longer provide this class because I am not familiar with specification of a thesis in Iran and even if I was, the specifications are different from University to University. `XePersian` is a general package like `LATEX` 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 over XeTeX)
Description: The package supports Persian
typesetting, using fonts provided in the distribution.
Copyright © 2008-2013 Persian TeX Group
v12.1, 2013/04/04
License: LaTeX Project Public License, version 1.3c or higher (your
choice)
Location on CTAN: /macros/xetex/latex/xepersian
```

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 `TEX` but lion does not symbolizes `XePersian`. `Simorgh`¹ (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.

¹`Simorgh` 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>

 \xepersiandate gives the current date of the package.

```
1 \documentclass{article}
2 \usepackage{xepersian}
3 \settextfont{XB Niloofar}
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 four options:

2.4.1 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.

2.4.2 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. Please note that unfortunately X series fonts of IRMUG (Iranian Mac Users Group) do not have Kashida support and if you use any of these fonts with `Kashida` option enabled, the result on the PDF viewed on the monitor is not pleasant, however the print may look fine. Hence if you are going to enable `Kashida` option , then you are advised to use either “Adobe Arabic” or “Scheherazade” fonts or any other fonts that has fine Kashida support, like Persian Modern font (the default font of XePersian package).

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.

2.4.3 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 escape (or `write18`) is not enabled.

2.4.4 localise Option

The `localise` option is now active by default; it allows you to use most frequently-used `LATEX` commands and environments in Persian, almost like what `TEX-e-Parsi` offers. This is still work in progress and we wish to add lots more Persian equivalents of `LATEX` and `TEX` commands and environments. The Persian equivalents of `LATEX` and `TEX` commands are shown in [Table 1](#), The Persian equivalents of XePersian commands are shown in [Table 2](#), Persian equivalents of `LATEX` environments are shown in [Table 3](#) and Persian equivalents of XePersian environments are shown in [Table 4](#)

Please note that the Persian equivalents of `LATEX` and `TEX` 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 `LATEX` and `TEX` commands and environments, but still original `LATEX` and `TEX` commands and environments work too.

The `TEX` `LATEX` 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 `LATEX` and `TEX` Commands

Command in <code>TEX</code> or <code>LATEX</code>	Equivalent Persian Command
<code>\@arstrut</code>	<code>\شمع جدول</code>

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\above	\ فوق
\abovedisplayshortskip	\ فاصله کوتاه بالای نمایش
\abovedisplayskip	\ فاصله بالای نمایش
\abstractname	\ عنوان چکیده
\accent	\ اکسنت
\active	\ فعل
\addcontentsline	\ بیفزاسطر فهرست
\addpenalty	\ اضافه بر جریمه
\address	\ نشانی
\addtocontents	\ بیفزابه فهرست
\addtocounter	\ اضافه بر شمارنده
\addtolength	\ اضافه بر بعد
\addvspace	\ بیفزافضای و
\adjdemerits	\ تنظیم بد نمایی
\advance	\ بیفزابر
\afterassignment	\ بعد از انتساب
\aftergroup	\ بعد از گروه
\aleph	\ الف
\aliasfontfeature	\ خصیصه مستعار قلم
\aliasfontfeatureoption	\ انتخاب خصیصه مستعار قلم
\allowbreak	\ شکستنی
\alloc@	\ تخصی @
\allocationnumber	\ تخصیص یافته
\allowdisplaybreaks	\ شکست نمایش مجاز
\Alph	\ حروف بزرگ
\alph	\ حروف کوچک
\alsooname	\ نام همچنین
\and	\ و
\angle	\ زاویه
\appendixname	\ عنوان پیوست
\approx	\ تقریب
\arabic	\ عربی
\arg	\ آرگ
\arrayrulecolor	\ رنگ خط جدول
\arraycolsep	\ فاصله ستونهای آرایه
\arrayrulewidth	\ ضخامت خط جدول
\arraystretch	\ کشیدگی آرایه
\AtBeginDocument	\ در آغاز نوشتار
\AtEndDocument	\ در پایان نوشتار
\AtEndOfClass	\ در انتهای طبقه

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\AtEndOfPackage	\ادرانتهای سبک
\author	\نویسنده
\backmatter	\مطلب پشت
\backslash	\شکاف پشت
\badness	\بدنایی
\bar	\میله
\baselineskip	\فاصله کرسی
\baselinestretch	\کشش فاصله کرسی
\batchmode	\پردازش دسته‌ای
\begin	\شروع
\beginL	\شروع چپ
\beginR	\شروع راست
\begingroup	\شروع گروه
\belowdisplayshortskip	\فاصله کوتاه‌پایین نمایش
\belowdisplayskip	\فاصله پایین نمایش
\bf	\سیاه
\bfdefault	\پیش‌فرض سیاه
\bfseries	\شمايل سیاه
\bgroup	\شرگروه
\bibitem	\مرجوع
\bibliography	\کتاب‌نامه
\bibliographystyle	\اسبک کتاب‌نامه
\bibname	\عنوان کتاب‌نامه
\bigskip	\پرش‌بلند
\bigskipamount	\مقدار پرش‌بلند
\botfigrule	\خط‌پایین‌شناور
\botmark	\علامت‌پایین
\bottompageskip	\کادر تا پایین
\bottomfraction	\نسبت‌پایین
\box	\کادر
\boxmaxdepth	\حداکثر عمق کادر
\break	\ بشکن
\bullet	\ گلوله
\@cclv	\ دوپن@پنج
\@cclvi	\ دوپن@شش
\caption	\ شرح
\catcode	\ کدرده
\cc	\ رونوشت
\ccname	\ نام‌رونوشت
\cdot	\ نقطه و سط

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\cdots	\نقطه‌س ط
\centering	\تنظيم‌از‌وسط
\centerline	\خط‌وسط
\ch@ck	\چک‌@‌ن
\chapter	\فصل
\chaptername	\عنوان‌فصل
\char	\نویسه
\chardef	\تعریف‌نویسه
\CheckCommand	\بررسی‌فرمان
\cite	\مراجع
\ClassError	\خطای‌طبقه
\ClassInfo	\اطلاع‌طبقه
\ClassWarning	\هشدار‌طبقه
\ClassWarningNoLine	\هشدار‌طبقه‌بی‌سطر
\cleaders	\نشانگر‌مرکزی
\cleardoublepage	\دوصفه‌پاک
\clearpage	\صفه‌پاک
\cline	\خط‌نایپ
\closein	\بیند‌ورودی
\closeout	\بیند‌خروجی
\closing	\بستن
\clubpenalty	\جریمه‌سرband
\clubsuit	\اخراج
\colbotmark	\علامت‌پایین‌ستون‌اول
\colfirstmark	\علامت‌اول‌ستون‌اول
\color	\رنگ
\colorbox	\کادر‌رنگ
\coltopmark	\علامت‌بالای‌ستون‌اول
\columncolor	\رنگ‌ستون
\columnsep	\بین‌ستون
\columnwidth	\پهنه‌ای‌ستون
\columnseprule	\خط‌بین‌ستون
\contentsline	\سطر‌فهرست
\contentsname	\عنوان‌فهرست‌مطالب
\copy	\کپی
\copyright	\حق‌تألیف
\count	\شمار
\count@	\شمار‌@
\countdef	\تعریف‌شمار
\cr	\سخ

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\crrc	\استخسخ
\csname	\نامفرمان
\CurrentOption	\اگزینه‌جاري
\dashbox	\کادر‌بیتابین
\dashv	\بینایینع
\@date	\تاریخ@
\date	\تاریخ
\day	\روز
\dblbotfigrule	\خط‌پایین‌شناور‌پهن
\dblbottomfraction	\نسبت‌پهن‌پایین
\dblfigrule	\خط‌بالای‌شناور‌پهن
\dblfloatpagefraction	\نسبت‌صفحه‌شناور‌پهن
\dblfloatsep	\فاصله‌بین‌شناور‌پهن
\dblfntlocatecode	\اکد‌مکان‌غیره‌مانطور
\dbltextfloatsep	\فاصله‌من و‌شناور‌پهن
\dbltopfraction	\نسبت‌پهن‌بالا
\DeclareFixedFont	\اعلان‌قلم‌ثابت
\DeclareGraphicsExtensions	\اعلان‌پسوند‌گرافیک
\DeclareGraphicsRule	\اعلان‌دستور‌گرافیک
\DeclareOldFontCommand	\اعلان‌فرمان‌قلم‌ قدیمی
\DeclareOption	\اعلان‌گزینه
\DeclareRobustCommand	\اعلان‌فرمان‌قوی
\DeclareSymbolFont	\اعلان‌قلم‌علائم
\deadcycles	\دوربسته
\def	\تر
\define@key	\تعريف‌@‌کلید
\definecolor	\تعريف‌رنگ
\deg	\درجہ
\delcode	\اکد‌جدا‌ساز
\delimiter	\احدادا‌ساز
\delimiterfactor	\ضریب‌جدا‌ساز
\depth	\گودی
\diamondsuit	\خشتم
\dim	\ابعاد
\dimen	\بعد
\dimen@	\بعد@
\dimen@i	\بعد@یک
\dimen@ii	\بعد@دو
\dimendef	\تعريف‌بعد
\discretionary	\تیره‌گذاری

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\displaybreak	\شکستنمايش
\displayindent	\تورفتگىنمايش
\displaystyle	\سبکنمايش
\displaywidth	\عرضنمايش
\divide	\ تقسيم
\documentclass	\طبقهنوشتار
\do	\اكن
\dospecials	\تعويضكدها
\dot	\نقطه
\doteq	\نقطهمساوي
\dotfill	\پر نقطه
\dots	\نقطات
\doublebox	\کادردولا
\doublerulesepcolor	\رنگ فاصله دو خط جدول
\doublerulesep	\فاصله بين دو خط
\downarrow	\فلش پابين
\dp	\عمق
\dump	\تخليه
\edef	\ترگ
\egroup	\پاگروه
\eject	\انتهاي فاصله
\else	\اگرنه
\em	\تاکيد
\emergencystretch	\کشش لاجرم
\emph	\موکد
\empty	\@_
\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	\تبند
\endgroup	\پيان گروه
\endhead	\پيان سر
\endinput	\پيان ورودی
\endlastfoot	\پيان آخرین پا
\enlargethispage	\گسترش اين صفحه

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\endline	\ته سطر
\endlinechar	\نویسه ته سطر
\enspace	\ان دوری
\enskip	\ان فاصله
\eqcommand	\فرمان جانشین
\eqenvironment	\محیط جانشین
\eqref	\ارجاع فر
\errhelp	\کمک خطأ
\errmessage	\پیام خطأ
\errorcontextlines	\سطر متن خطأ
\errorstopmode	\پردازش توقف خطأ
\escapechar	\نویسه ویره
\euro	\یورو
\evensidemargin	\حاشیه روزج
\everycr	\هر سخ
\everydisplay	\هر نمایش
\everyhbox	\هر کادرا
\everyjob	\هر کار
\everymath	\هر ریاضی
\everypar	\هر بند
\everyvbox	\هر کادرو
\ExecuteOptions	\اجرای گزینه ها
\exhyphenpenalty	\جریمه اضافی تیره بندی
\expandafter	\بگستریس از
\extracolsep	\فاصله اضافی بین ستونها
\@firstofone	\اولی از یک @\
\@firstoftwo	\اولی از دو @\
\f@ur	\چ @ ار
\fam	\خانواده
\fancypage	\صفحه تجملی
\fbox	\کادر با
\fboxrule	\ضخامت کادر با
\fboxsep	\حاشیه کادر با
\fcolorbox	\کادر بارنگ
\fi	\رگ
\figurename	\عنوان شکل
\filbreak	\پرشکن
\fill	\پر
\firstmark	\علامت اول
\flat	\پهن

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\floatpagefraction	\نسبتصفحهشناور
\floatingpenalty	\حریمهشناور
\floatsep	\فاصلهبینشناور
\flushbottom	\تنظیمازپایین
\fmtname	\شکلندی
\fmtversion	\ردهشکلندی
\fnsymbol	\نشانه
\font	\قلم
\fontdimen	\بعدقلم
\fontencoding	\رمزنیهقلم
\fontfamily	\فamilیقلم
\fontname	\نامقلم
\fontseries	\شمایلقلم
\fontshape	\شكلقلم
\fontsize	\اندازهقلم
\footheight	\بلندایپایینصفحه
\footins	\درجزیرنویس
\footnote	\زیرنویس
\footnotemark	\علامتزیرنویس
\footnoterule	\خطزیرنویس
\footnotesep	\فاصلهتازیرنویس
\footnotesize	\اندازهزیرنویس
\footnotetext	\متنزیرنویس
\footskip	\فاصلهتابایینصفحه
\frame	\فریم
\framebox	\کادر با خ
\frenchspacing	\فو اصل یکنواخت لاتین
\frontmatter	\مطلوب پیش
\futurelet	\بعد بگذار
\@gobble	\@خور حریصانه
\@gobbletwo	\@خور حریصانه دو
\@gobblefour	\@خور حریصانه چهار
\@gtempa	\@عاقت آ
\@gtempb	\@عاقت ب
\gdef	\ترع
\GenericInfo	\الگوی اطلاع
\GenericWarning	\الگوی هشدار
\GenericError	\الگوی خطأ
\global	\عام
\globaldefs	\تعاریف عام

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\glossary	\لغت‌نامه
\glossaryentry	\فقره‌فرهنگ
\goodbreak	\اخوش‌شکن
\graphpaper	\کاغذ‌گراف
\guillemotleft	\گیومه‌چپ
\guillemotright	\گیومه‌راست
\guilsinglleft	\گیومه‌تکی‌چپ
\guilsinglright	\گیومه‌تکی‌راست
\halign	\ردیف‌ا
\hang	\بروتو
\hangafter	\بعدازسطر
\hangindent	\تورفتگی‌ثابت
\hbadness	\بدنمایی‌ا
\hbox	\کادرا
\headheight	\بلندای‌سرصفحه
\headsep	\فاصله‌از‌سرصفحه
\headtoname	\سریه‌نام
\heartsuit	\دل
\height	\بلندا
\hfil	\پرا
\hfill	\پررا
\hfilneg	\رفع‌پرا
\hfuzz	\پرزاوی
\hideskip	\فاصله‌مخفى
\hidewidth	\عرض‌پنهان
\hline	\خط‌پر
\hoffset	\حاشیه‌ا
\holdinginserts	\حفظ‌درج
\hrboxsep	\فاصله‌اگرد
\hrule	\خط‌ا
\rulefill	\پرخط‌ا
\hspace	\طول‌سطر
\hskip	\فاصله‌ا
\hspace	\فضای‌ا
\hss	\هردو
\ht	\ارتفاع
\huge	\بزرگ
\Huge	\بزرگ‌تر
\hyperlink	\ابرپیوند
\hypersetup	\بارگذاری‌ابر

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\hypertarget	\هدفابر
\hyphenation	\تیره‌بندی
\hyphenchar	\نویسه‌تیره
\hyphenpenalty	\جریمه‌تیره‌بندی
\@ifclassloaded	\@گر کلاس‌فراخوانی‌شده
\@ifdefinable	\@گرترشدنی
\@ifnextchar	\@گر نویسه‌بعدی
\@ifpackageloaded	\@گرسنگ‌فراخوانی‌شده
\@ifstar	\@گرستاره
\@ifundefined	\@گر تعریف‌نشده
\if	\اگر
\if@tempswa	\اگر @ سواقت آ
\ifcase	\اگرانواع
\ifcat	\اگر رده
\ifdefined	\اگر تعریف‌شده
\ifdim	\اگر بعد
\ifeof	\اگر ته‌پرونده
\iff	\اگر
\iffalse	\اگر نادرست
\IfFileExists	\اگر پرونده‌موجود
\ifhbox	\اگر کادرا
\ifhmode	\اگر حالت ا
\ifinner	\اگر درونی
\ifmmode	\اگر حالت‌ریاضی
\ifnum	\اگر عدد
\ifodd	\اگر فرد
\ifthenelse	\اگر آنگاه‌دیگر
\iftrue	\اگر درست
\ifvbox	\اگر کادرو
\ifvmode	\اگر حالت و
\ifvoid	\اگر تهی
\ifx	\اگر قائم
\ignorespaces	\فاصله‌خالی‌راندیده‌بگیر
\immediate	\فوری
\include	\شامل
\includegraphics	\درج تصویر
\includeonly	\مشمولین
\indent	\تورفتگی
\index	\درنماهیه
\indexentry	\استعلام

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\indexname	\عنوان‌نمایه
\indexspace	\فاصله‌رهنما
\input	\وردی
\InputIfFileExists	\ورد پرونده‌گر موجود
\inputlineno	\شماره‌سپروردی
\insert	\درج
\insertpenalties	\جریمه‌درج
\interfootnotelinepenalty	\جریمه‌بین‌سطرهای زیرنویس
\interdisplaylinepenalty	\جریمه‌بین‌سطرهای نمایش
\interlinepenalty	\جریمه‌بین‌سطرها
\intertext	\امتن داخلی
\intertextsep	\فاصله‌شناور در متن
\invisible	\مخفي
\itdefault	\پيش‌فرض‌اي
\itshape	\شكلي‌اينتاليك
\item	\فقره
\itemindent	\تورفتگي‌فقره
\itemsep	\فاصله‌فقره
\iterate	\تكرار‌كن
\itshape	\شكلي‌اي
\jobname	\نام‌كار
\jot	\قلپ
\kern	\دورى
\kill	\الگو
\label	\برچسب
\labelenumi	\برچسب‌شمارش‌يک
\labelenumii	\برچسب‌شمارش‌دو
\labelenumiii	\برچسب‌شمارش‌سه
\labelenumiv	\برچسب‌شمارش‌چهار
\labelitemi	\برچسب‌فقره‌يک
\labelitemii	\برچسب‌فقره‌دو
\labelitemiii	\برچسب‌فقره‌سه
\labelitemiv	\برچسب‌فقره‌چهار
\labelsep	\فاصله‌از‌برچسب
\labelwidth	\پهنان‌برچسب
\language	\زبان
\large	\درشت
\Large	\درشت‌تر
\LARGE	\درشت‌درشت
\lastbox	\آخرین‌کادر

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\lastkern	\آخرین دوری
\lastpenalty	\آخرین جریمه
\lastskip	\آخرین فاصله
\LaTeX	\لاتک
\LaTeXe	\لاتک ای
\lccode	\کد کوچک
\ldots	\نقاط خ
\leaders	\انسانگر
\leavevmode	\ترک و
\left	\چپ
\leftmargin	\حاشیه چپ
\leftmargini	\حاشیه چپ یک
\leftmarginii	\حاشیه چپ دو
\leftmarginiii	\حاشیه چپ سه
\leftmarginiv	\حاشیه چپ چهار
\leftmarginv	\حاشیه چپ پنج
\leftmarginvi	\حاشیه چپ شش
\leftmark	\علامت چپ
\leftpageskip	\کادر 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	\تورقتگی بند لیست
\listtablename	\عنوان فهرست جداول
\LoadClass	\بارکن طبقه
\LoadClassWithOptions	\بارکن طبقه با گزینه
\location	\مکان
\long	\بلند
\loop	\حلقه

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\looseness	\گسیختگی
\lower	\انتقال پایین
\@makeother	\دیگر
\@m	\@زار
\@M	\@زار
\@Mi	\@زاریک
\@Mii	\@زاردو
\@Miii	\@زارسه
\@Miv	\@زارچهار
\@MM	\بیس@زار
\m@ne	\من@ا
\mag	\بزرگنمایی
\magstep	\گام
\magstephalf	\نیم گام
\mainmatter	\مطلوب اصلی
\makeatletter	\ات حرف
\makeatother	\ات دیگر
\makebox	\کادر بی خط
\makeglossary	\اساخت فرهنگ
\makeindex	\تهیه نمایه
\makelabel	\اساخت برچسب
\makelabels	\اساخت برچسب ها
\MakeLowercase	\اساخت حروف کوچک
\maketitle	\عنوان ساز
\MakeUppercase	\اساخت حروف بزرگ
\marginpar	\در حاشیه
\marginparpush	\فاصله دو حاشیه
\marginparsep	\فاصله تهاشیه
\marginparwidth	\پهنای حاشیه
\mark	\علامت
\markboth	\علامت در در طرف
\markright	\علامت در راست
\mathaccent	\عرب ریاضی
\mathchar	\نویسه ریاضی
\mathchardef	\تعریف نویسه ریاضی
\mathcode	\کد ریاضی
\mathrm	\ریاضی رومان
\maxdeadcycles	\حد اکثر تکرار
\maxdepth	\حد اکثر عمق صفحه
\maxdimen	\بعد بیشین

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Command in TeX or L^AT_EX Equivalent Persian Command

\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
\MessageBreak	\پیام شکن
\minrowclearance	\حداقل فاصله ردیف
\mkern	\دوری ریاضی
\month	\ماه
\moveleft	\انتقال بچپ
\moveright	\انتقال براست
\mskip	\فاصله ریاضی
\m@th	\ری@ضی
\multicolumn	\چند ستونی
\multiply	\ضرب
\multispan	\چند ادغام
\muskip	\میوفاصله
\muskipdef	\تعریف میوفاصله
\@namedef	\@ ترnam
\@nameuse	\@ کاربردنام
\@ne	\یک @
\name	\نام
\natural	\طبیعی
\nearrow	\باریک
\nearrower	\باریکتر
\NeedsTeXFormat	\شکل بنده موردنیاز
\neg	\منفی
\negmedspace	\فضای متوسط منفی
\negthickspace	\فضای ضخیم منفی
\negthinspace	\دوری کوچک منفی
\newboolean	\بولی نو
\newbox	\کادر جدید
\newcommand	\فرمان نو
\newcount	\شمارج دید
\newcounter	\شمارنده جدید
\newdimen	\بعد جدید

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\newenvironment	\محیطنو
\newfam	\خانواده جدید
\newfont	\قلمنو
\newhelp	\اکمک جدید
\newif	\اگر جدید
\newinsert	\درج جدید
\newline	\سطر جدید
\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	\بیر دیف
\nobreak	\نشکن
\nobreakspace	\فاصله نشکستنی
\nocite	\ بدون سند
\noexpand	\نگستر
\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

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\notag	\ بدون اتیکت
\null	\ نول
\nullfont	\ قلم‌تهی
\number	\ عدد
\numberline	\ سطر عددی
\numberwithin	\ شماره مطابق
\@evenfoot	\ پایین صفحه زوج
\@evenhead	\ بالای صفحه زوج
\@oddfoot	\ پایین صفحه فرد
\@oddhead	\ بالای صفحه فرد
\@outeqntrue	\ شماره بیرون درست
\@outeqnfal se	\ شماره بیرون نادرست
\obeylines	\ سطر به سطر
\obeyspaces	\ فضاعمال
\oddsidemargin	\ حاشیه فرد
\offinterlineskip	\ سطور بی فاصله
\omit	\ حذف
\@onlypreamble	\ تهادر پیش درآمد
\onecolumn	\ یک ستون
\onlynotes	\ تهادیداشت ها
\onlyslides	\ تهادا اسلاید ها
\openin	\ باز کن ورودی
\openout	\ باز کن خروجی
\OptionNotUsed	\ گزینه مصرف نشده
\or	\ یا
\outer	\ بروندی
\output	\ صفحه بندی
\outputpenalty	\ جریمه صفحه بندی
\overfullrule	\ علامت سرریز
\@preamblecmds	\ فرمان های پیش درآمد
\p@	\ پو
\PackageError	\ خطای سیک
\PackageInfo	\ اطلاع سیک
\PackageWarning	\ هشدار سیک
\PackageWarningNoLine	\ هشدار سیک بی سطر
\pagebreak	\ صفحه شکن
\pagecolor	\ رنگ صفحه
\pagedepth	\ عمق صفحه
\pagefillstretch	\ کشش پر ر صفحه
\pagefillstretch	\ کشش پر صفحه

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\pagefilstretch	\کشش پر صفحه
\pagegoal	\غایت صفحه
\pagename	\نام صفحه
\pagenumbering	\شماره گذاری صفحه
\pageref	\رجوع صفحه
\pagerulewidth	\ضخامت خط صفحه
\pageshrink	\فشردگی صفحه
\pagestretch	\کشش صفحه
\pagestyle	\سیک صفحه
\pagetotal	\جمع صفحه
\paperheight	\بلندای کاغذ
\paperwidth	\پهنای کاغذ
\par	\بند
\paragraph	\پاراگراف
\parallel	\موازی
\parbox	\کادر پار
\parfillskip	\فاصله ته بند
\parindent	\تورفتگی سربند
\parsep	\فاصله بند لیست
\parshape	\شكل 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	\الگوها
\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 بند نمایی
\prevdepth	\عمق قبلی
\prevgraf	\بند قبلی
\printindex	\نمایه در اینجا

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\ProcessOptions	\پردازش‌گزینه‌ها
\protect	\تامین
\providecommand	\تهیه‌فرمان
\ProvidesClass	\آماده‌سازی‌طبقه
\ProvidesFile	\آماده‌سازی‌پرونده
\ProvidesPackage	\آماده‌سازی‌سبک
\pushtabs	\ثبت‌الگو
\quad	\کواد
\quad\quad	\کوکواد
\@outputpagerestore	\@باز‌آیی‌خروج‌صفحه
\radical	\رادیکال
\raggedbottom	\پایین‌بی‌تنظیم
\raggedleft	\تنظيم‌از‌راست
\raggedright	\تنظيم‌از‌چپ
\raise	\انتقال‌بالا
\raisebox	\بالابر
\raisetag	\ترفیع‌اتیکت
\rangle	\زاویه‌ر
\rceil	\سقف‌ر
\read	\بخوان
\ref	\رجوع
\reflectbox	\کادر‌قرینه
\refname	\عنوان‌مراجع
\refstepcounter	\گام‌شمارنده‌مرجع
\relax	\راحت
\removelastskip	\رفع‌آخرین‌فاصله
\renewcommand	\فرمان‌از‌نو
\renewenvironment	\محیط‌از‌نو
\repeat	\از‌نو
\RequirePackage	\سبک‌موردنیاز
\RequirePackageWithOptions	\سبک‌موردنیاز‌با‌گزینه
\resizebox	\کادرکشیده
\reversemarginpar	\در‌حاشیه‌معکوس
\rfloor	\کفر
\right	\راست
\rightmargin	\حاشیه‌راست
\rightmark	\علامت‌راست
\rightpageskip	\کادرتاراست
\rightskip	\فاصله‌انتهای‌سطر
\rmdefault	\روم‌عادی

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\rmfamily	\فamilی‌رومن
\Roman	\روم‌بزرگ
\roman	\روم‌کوچک
\romannumeral	\عدد‌رومی
\rotatebox	\کادر‌چرخان
\rowcolor	\رنگ‌ردیف
\rule	\خط
\@secondoftwo	\@دویی‌ازدو
\@spaces	\فضاها
\samepage	\همین‌صفحه
\savebox	\مقدار‌کادر
\sbox	\مقادار
\scalebox	\کادراندازه
\scdefault	\پیش‌فرض‌تمام‌بزرگ
\scshape	\اشکل‌تمام‌بزرگ
\scriptfont	\قلم‌توان
\scriptscriptfont	\قلم‌توان‌توان
\scriptsize	\سبک‌ته‌نوشت‌ته‌نوشت
\scriptstyle	\اندازه‌پانویس
\scrollmode	\سبک‌ته‌نوشت
\section	\پردازش‌گذری
\secdef	\قسمت
\see	\تعريف‌قسمت
\seealso	\بینید
\seename	\نیز‌بینید
\selectfont	\نام‌بینید
\setboolean	\قلم‌بردار
\setbox	\تنظیم‌بولی
\setcounter	\در کادر
\setkeys	\مقدارشمارنده
\setlength	\مقدارکلیدها
\setminus	\مقدار بعد
\SetSymbolFont	\تنظيم‌منها
\settodepth	\تعريف‌قلم‌علاوئم
\settoheight	\تنظیم‌به‌عمق
\settowidth	\تنظیم‌به‌ارتفاع
\sfcode	\مقدار بعد‌به‌اندازه
\sfdefault	\اکد‌ضریب‌فاصله
\sffamily	\پیش‌فرض‌س‌ف
	\فamilی‌سن‌سریف

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\shadowbox	\کادرسایه‌دار
\sharp	\تیز
\shipout	\بفرست
\shortstack	\پشته‌کوتاه
\show	\نمایش‌بده
\showbox	\نمایش‌بده‌کادر
\showboxbreadth	\میزان‌نمایش‌کادر
\showboxdepth	\عمق‌نمایش‌کادر
\showlists	\نمایش‌بده‌لیستها
\showthe	\نمایش‌بده‌محظوای
\simplefontmode	\حالت‌ساده‌قلم
\sixt@n	\شانزد@
\skewchar	\نویسه‌اریب
\skip	\فاصله
\skip@	@\فاصله
\skipdef	\تعريف‌فاصله
\sl	\خوابیده
\sldefault	\پیش‌فرض‌خو
\slshape	\شکل‌خوابیده
\sloppy	\راحت‌چین
\slshape	\شمایل‌خو
\small	\کوچک
\smallskip	\پرش‌کوتاه
\smallskipamount	\مقدار‌پرش‌کوتاه
\smash	\کوب
\smile	\الخند
\snglfntlocatecode	\کدمکان‌همانطور
\space	\فضا
\spacefactor	\ضریب‌فاصله
\spaceskip	\فاصله‌کلمات
\spadesuit	\پیک
\span	\ادغام
\special	\ویرژ
\splitmaxdepth	\حداکثر‌عمق‌ستون
\splittopskip	\فاصله‌بالای‌ستون
\star	\ستاره
\stepcounter	\گام‌شمارنده
\stretch	\کشی
\string	\رشته
\strut	\شمع

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Command in TeX or L ^A T _E X	Equivalent Persian Command
\strutbox	\کادرشمع
\subitem	\زیربند
\ subparagraph	\زیرپاراگراف
\ subsection	\زیرقسمت
\ substack	\زیرپشتہ
\ subsubitem	\زیرزیربند
\ subsubsection	\زیرزیرقسمت
\ subset	\زیرمجموعه
\ subseteq	\زیرمجموعهمس
\ supereject	\منتهایصفحه
\ suppressfloats	\حذفمکانشناور
\@tempa	\موقتا
\@tempb	\موقتب
\@tempc	\موقتب
\@tempd	\موقتب
\@tempe	\موقتب
\@tempboxa	\کادرقتا
\@tempcnta	\شماقتا
\@tempcntb	\شماقتب
\@tempdima	\بعدقتا
\@tempdimb	\بعدقتب
\@tempdimc	\بعدقتبپ
\@tempskipa	\فاقتا
\@tempskipb	\فاقتب
\@tempswafalse	\سواقتآندرست
\@tempswatrue	\سواقتآدرست
\@temptokena	\جزقتا
\@thefnmark	\انگزيرنويس
\@thirdofthree	\سومي ازسه
\tabbingsep	\فاصله جاگذاري
\tabcolsep	\فاصله بين ستونها
\tableofcontents	\فهرست مطالع
\tablename	\عنوان جدول
\tabskip	\فاصله ستونها
\tabularnewline	\تسطريجدول
\tag	\اتيكت
\telephone	\تلفن
\TeX	\اتک
\text	\متن
\textbullet	\گلوله متنی

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\textfont	\قلم‌من
\textemdash	\امدش‌منی
\textendash	\اندش‌منی
\textexcldown	\تعجب‌وارونه‌منی
\textperiodcentered	\ نقطه‌وسط‌منی
\textquestiondown	\سؤال‌وارونه‌منی
\textquotedblleft	\نقل‌چپ‌منی‌دولا
\textquotedblright	\نقل‌راست‌منی‌دولا
\textquotelleft	\نقل‌منی‌چپ
\textquoteright	\نقل‌منی‌راست
\textvisiblespace	\فضای‌نمایان‌منی
\textbackslash	\شکافت‌پشت‌منی
\textbar	\میله‌منی
\textgreater	\بزرگ‌تر‌منی
\textless	\کمتر‌منی
\textbf	\متن‌سیاه
\textcircled	\مدور‌منی
\textcolor	\رنگ‌من
\textcompwordmark	\نشان‌کلمه‌مرکب‌من
\textfloatsep	\فاصله‌من و شناور
\textfraction	\نسبت‌من
\textheight	\بلند‌ای‌من
\textindent	\متن‌تورفته
\textit	\متن‌ایتالیک
\textmd	\متن‌نازک
\textnormal	\متن‌نرمال
\textregistered	\ثبتی‌منی
\textrm	\متن‌روم
\textsc	\متن‌ تمام‌بزرگ
\textsf	\متن‌سن‌سریف
\textsl	\متن‌خوابیده
\textstyle	\سیک‌منی
\textsuperscript	\بالانویس‌منی
\texttrademark	\علامت‌تجاری‌منی
\texttt	\متن‌تاپ
\textup	\متن‌ایستاده
\textwidth	\پهنای‌من
\thanks	\زیرنویس‌عنوان
\the	\محتوای
\thempfn	\اين‌زيرنويس

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\thicklines	\خطهای ضخیم
\thickmuskip	\فاصله زیاد ریاضی
\thinmuskip	\فاصله کم ریاضی
\thickspace	\فضاهای ضخیم
\thinlines	\خطهای نازک
\thinspace	\دوری کوچک
\thisfancypage	\این صفحه تجملی
\thispagestyle	\سبک این صفحه
\thr@	@\سده
\tilde	\مد
\tiny	\ظریف
\time	\زمان
\times	\ضرب در
\title	\عنوان
\to	\به
\today	\امروز
\toks	\جزء
\toksdef	\تعریف جزء
\tolerance	\حد بندنامی
\top	\بالا
\topfigrule	\خط بالای شناور
\topfraction	\نسبت بالا
\topmargin	\حاشیه بالا
\topmark	\علامت بالا
\toppageskip	\کادر تابلا
\topsep	\فاصله بالای لیست
\topskip	\فاصله بالا
\totalheight	\بلندای کل
\tracingall	\ردگیری کل
\tracingcommands	\ردگیری فرمان‌ها
\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	\پیش‌فرض تایپ

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\ttfamily	\فamil تایپ
\tw@	@\دو
\twocolumn	\دوستون
\typein	\درنویس
\typeout	\برنویس
\uccode	\کدبزرگ
\uchyph	\تیره‌بندی‌بزرگ
\undefined	\تعريف‌نشده
\underline	\زیرخط
\unhbox	\بی‌کاردا
\unhcopy	\بی‌کپا
\unitlength	\ واحد طول
\unkern	\برگشت‌دوری
\unpenalty	\برگشت‌جریمه
\unskip	\برگشت‌فاصله
\unvbox	\بی‌کارو
\unvcopy	\بی‌کپی و
\updefault	\پیش‌فرض‌ایستاده
\upshape	\شکل‌ایستاده
\usebox	\ازکار
\usecounter	\باشمارشگر
\usefont	\اگزینش‌قلم
\usepackage	\اسیک‌لازم
\@vobeyspaces	\فضاهای‌فعال
\@void	\@‌تهی
\vadjust	\تنظیم و
\valign	\ردیف و
\value	\محتوای‌شمارنده
\vbadness	\بدنمایی و
\vbox	\کاردا
\vcenter	\کارروسط
\verb	\همانطور
\vfil	\پرو
\vfill	\پررو
\vfilneg	\رفع‌پرو
\vfuzz	\پرزمودی
\visible	\نمایان
\vline	\خط‌عمود
\voffset	\حاشیه و
\voidb@x	\ک‌@‌درتهی

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\vpageref	\ارجاع صفحه
\vrbboxsep	\فاصله و گرد
\vref	\ارجاع
\vrule	\خطو
\vsizer	\طول صفحه
\vskip	\فاصله و
\vspace	\فضای و
\vsplit	\شکست و
\vss	\هر دو و
\vtop	\کادر گود
\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	\سی @ 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 زیر نویس خود کار
\AutoMathsDigits	\اعداد فرمولهای خود کار
\DefaultMathsDigits	\اعداد فرمولهای لاتین
\deflatinfont	\تعریف قلم لاتین
\defpersianfont	\تعریف 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 زیر نویس چپ

Continued on next page

Command in XePersian	Equivalent Persian Command
\lr	\متن لاتین
\LRE	\چپ برآست
\LTRdblcol	\دوستونی چپ
\LTRfootnote	\پانویس
\LTRfootnotetext	\متن پانویس
\LTRthanks	\پانویس عنوان
\persianday	\روز پارسی
\persianfont	\قلم پارسی
\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 مرجوعات عادی
\setdefaultmarginpar	\بگذار در حاشیه عادی
\setdigitfont	\گزینش قلم اعداد فرمولها
\setfootnoteLR	\بگذار زیرنویس چپ
\setfootnoteRL	\بگذار زیرنویس راست
\setlatintextfont	\گزینش قلم لاتین متن
\setLTR	\بگذار متن چپ
\setLTRbibitems	\بگذار مرجوعات چپ
\setLTRmarginpar	\بگذار در حاشیه چپ
\setRTL	\بگذار متن راست
\setRTLbibitems	\بگذار مرجوعات راست
\setRTLmarginpar	\بگذار در حاشیه راست
\settextfont	\گزینش قلم متن
\textwidthfootnoterule	\خط زیرنویس پنهانی متن
\twocolumnstableofcontents	\فهرست مطالب دوستونی
\unsetfootnoteRL	\انگذار زیرنویس راست
\unsetLTR	\انگذار متن چپ
\unsetRTL	\انگذار متن راست

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Command in XePersian	Equivalent Persian Command
\vboxL	\کادر واژچه
\vboxR	\کادر واژراست
\XeTeX	\ازی لاتک
\XePersian	\ازی پرشین
\xepersianversion	\گونه‌زی پرشین
\xepersiandate	\تاریخ گونه‌زی پرشین
\XeTeX	\ازی لاتک

Table 3: The Equivalent L^AT_EX Environments

Environment in L ^A T _E X	Equivalent Persian Environment
abstract	چکیده
appendix	پیوست
array	آرایه
center	وسط‌چین
description	توضیح
displaymath	ریاضی‌نمایشی
document	نوشتار
enumerate	شمارش
figure	شکل
figure*	شکل*
filecontents	محتوا‌ی پرونده
filecontents*	محتوا‌ی پرونده*
flushleft	چپ‌چین
flushright	راست‌چین
itemize	فقرات
letter	نامه
list	لیست
longtable	جدول دراز
lrbox	کادر رج
math	ریاضی
matrix	ماتریس
minipage	صفحه کوچک
multicols	چندستونی‌ها
multiline	چند خطی
note	یادداشت
overlay	ابناشتن
picture	تصویر
quotation	اقتباس
quote	نقل

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Environment in L ^A T _E X	Equivalent Persian Environment
slide	اسلاید
sloppypar	پارنامرتب
split	شکافتن
subarray	زیرآرایه
tabbing	جاگذاری
table	لوح
table*	*لوح
tabular	جدول
tabular*	*جدول
thebibliography	مراجع
theindex	محظوای نمایه
titlepage	صفحه عنوان
trivlist	لیست بدوی
verbatim	همانطور که هست
verbatim*	*همانطور که هست
verse	شعر

Table 4: The Equivalent XePersian Environments

Environment in XePersian	Equivalent Persian Environment
latin	لاتین
LTR	متن چپ
LTRitems	دسته‌بندی چپ
persian	پارسی
RTL	متن راست
RTLitems	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
b	ز
c	و
C	س
h	ا
H	آ
J	ت
l	ج
L	ف

Continued on next page

Position argument in L^AT_EX Equivalent Persian position argument

m	م
p	پ
P	ص
r	ر
R	ا
s	ک
t	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).

2.4.5 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>	حفظ‌تناسب
<code>natwidth</code>	پهناى طبیعی
<code>natheight</code>	بلندای طبیعی
<code>bb</code>	مختصات
<code>viewport</code>	حدوده نمایش
<code>trim</code>	حذف اطراف
<code>angle</code>	زاویه
<code>width</code>	پهنا
<code>height</code>	بلندا
<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
b	ز
B	ک
false	نادرست
l	ج
r	ر
t	ب
true	درست

2.4.6 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	ویرگی های قلم عمودی
BoldFeatures	ویرگی های قلم سیاه
ItalicFeatures	ویرگی های قلم ایتالیک
BoldItalicFeatures	ویرگی های قلم ایتالیک سیاه
SlantedFeatures	ویرگی های قلم خوابیده
BoldSlantedFeatures	ویرگی های قلم خوابیده سیاه
SmallCapsFeatures	ویرگی های قلم کلاه کوچک
SizeFeatures	ویرگی های اندازه
Scale	ضریب
WordSpace	فضای کلمه
PunctuationSpace	فضای نقطه گذاری
FontAdjustment	تنظیم قلم
LetterSpace	فضای حرف
HyphenChar	نویسه تیره
Color	رنگ

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Original font feature	Equivalent Persian font feature
Opacity	کدری
Mapping	نگاشت
Weight	سنگینی
Width	پهنا
OpticalSize	اندازه‌چشمی
FakeSlant	خوابیده‌تقلیبی
FakeStretch	کشش‌تقلیبی
FakeBold	سیاه‌تقلیبی
AutoFakeSlant	خوابیده‌تقلیبی‌خودکار
AutoFakeBold	سیاه‌تقلیبی‌خودکار
Ligatures	دویاچند حرف‌متصل‌به‌هم
Alternate	متنابوب
Variant	گوناگون
Variant	مجموعه‌سبکی
CharacterVariant	گوناگونی‌نویسه
ScriptStyle	سبک اسکریپت
ScriptScriptStyle	سبک اسکریپت‌اسکریپت
Style	سبک
Annotation	بادداشت
RawFeature	ویرگی‌های کال
CharacterWidth	پهنا نویسه
Numbers	ارقام
Contextuals	متخی
Diacritics	تفکیک‌کنندگان
Letters	حروف
Kerning	دوری
VerticalPosition	موقعیت‌عمودی
Fractions	کسر

Table 9: Persian Equivalent font feature options

font feature	font feature option	Persian font feature option
Language	Default	پیش‌فرض
Language	Parsi	پارسی
Script	Parsi	پارسی
Script	Latin	لاتین

2.5 A Sample Input TeX File

```

1 \documentclass{article}
2 \usepackage{xepersian}
3 \settextfont{XB Niloofar}
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>}
\setdigitfont [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. If you do not use this command at all, the `Persian Modern`² font will be used 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 `TEX` font (fonts used in this documentation) will be used for Latin texts of your document.
- ☞ `\setdigitfont` will choose the Persian font for digits in math mode. By default, digits in math mode will appear in Persian form and if you do not use this command at all, the `Persian Modern` font for digits in math mode will be used.
- ☞ `\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 `TEX` font for digits in math mode inside `\mathsf` and digits appear in their original form (Western).

²You do not need to install `Persian Modern` fonts since they are already included in your `TeX` distribution.

 \setmathttdigitfont 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 TEX 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 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.

3.2 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.

3.3 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.

3.4 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:

```
\harfinumerical{<integer>} \adadinumerical{<integer>} \tartibinumerical{<integer>}
```

- ☞ 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.
- ☞ **\harfinumerical** returns the **harfi** form of *<integer>*, where $1 \leq \text{integer} \leq 32$ and **\adadinumerical**, and **\tartibinumerical** return **adadi**, and **tartibi** form of *<integer>* respectively, where $0 \leq \text{integer} \leq 999,999,999$.

3.5 Things To Know About **\setdigitfont**, **\setmathsf digitfont**, and **\setmathtt digitfont**

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

- ☞ As we discussed before, **\setdigitfont** will choose the Persian font for digits in math mode. By default, digits in math mode will appear in Persian form and if you do not use this command at all, the **Persian Modern** font for digits in math mode will be used.
- ☞ 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 **\setdigitfont**, **\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) \Alph, \alph, \Roman, \roman or \arabic.

In addition with the extra support that XePersian provides, an occurrence of one of the tokens l, ى, or ۡ 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, ى, ۡ 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 create³ a magazine just load the class as usual⁴, with

³For a sample file, please look at `magazine-sample.tex` in the `doc` folder

⁴You 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.

```
\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 the main heading in the front page. The first one takes two arguments `(image)` and `(description)`. Notice that second argument is optional and it declares the image caption; `(image)` 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 `(subtitle)` and `(pagesof)` 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{\langle type \rangle}{\langle text \rangle}  
\expandedtitle{\langle type \rangle}{\langle text \rangle}
```

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}{\langle num-of-columns \rangle}{\langle title \rangle}{\langle author \rangle}{\langle label \rangle}  
...{\langle text \rangle}...  
\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. Althought it has its own title and subtitle, each piece of article within it may have a title. To use it just type:

```
\begin{shortarticle}{\langle num-of-columns \rangle}{\langle title \rangle}{\langle subtitle \rangle}{\langle label \rangle}  
...{\langle text \rangle}...  
\shortarticleitem{\langle title \rangle}{\langle text \rangle}  
...  
\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 *<section name>*. From the point it is used, all articles which follow will be grouped within the new section.

```
\newsection{\<section name>}
```

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.

```
\minragedcols \raggedFormat
```

The `\minragedcols` 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 `\minragedcols` 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, `\minragedcols` 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{\langle left\rangle}{\langle center\rangle}{\langle right\rangle}  
\foot{\langle left\rangle}{\langle center\rangle}{\langle right\rangle}
```

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 `xepersian-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.