



# The XePersian Package

User documentation for version 26.1

*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/xepersian/xepersian/issues>

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

You may also have conversations, ask questions and post answers without opening issues using the Discussions space:

<https://github.com/xepersian/xepersian/discussions>

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# The XePersian Package

## Persian for L<sup>A</sup>T<sub>E</sub>X 2<sub>E</sub>, using XeT<sub>E</sub>X engine

User documentation for version 26.1

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# 1 Introduction

XePersian is a package for typesetting Persian/English documents with Xe<sup>L</sup>T<sub>E</sub>X. The package includes adaptations for use with many other commonly-used packages.

## 1.1 Important Notes

- ☞ The XePersian package only works with Xe<sup>L</sup>T<sub>E</sub>X 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 was provided for typesetting theses. 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<sup>A</sup>T<sub>E</sub>X 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 T<sub>E</sub>X 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--2025 Vafa Khalighi
* Copyright (c) 2018--2020 bidi-tex GitHub Organization
*
* v26.1 (Release Persian Gate), 2025/01/08
*
* License: LaTeX Project Public License, version
* 1.3c or higher (your choice)
*
* Location on CTAN: /macros/xetex/latex/xepersian
*
* Issue tracker: https://github.com/xepersian/xepersian/issues
*
* Discussions: https://github.com/xepersian/xepersian/discussions
*
* Primary author of xepersian package: Vafa Khalighi.
```



```
*  
*****
```

## 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 typesetting.

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<sup>1</sup> (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 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 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.

### 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:

---

<sup>1</sup>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>



```
\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 `\`` is grouped under `\l`) for sorting Persian alphabets.

#### 2.4.6 quickindex-variant2 Option

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

#### 2.4.7 localise Option

This option 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{\langle command-name in Persian \rangle}{\langle original LATEX command-name \rangle}
\eqenvironment{\langle environment-name in Persian \rangle}{\langle original LATEX environment-name \rangle}
```

Table 1: The Equivalent L<sup>A</sup>T<sub>E</sub>X and T<sub>E</sub>X Commands

Command in T <sub>E</sub> X or L <sup>A</sup> T <sub>E</sub> X	Equivalent Persian Command
\@arstrut	\شمع جدول
\above	\فوق
\abovedisplayshortskip	\فاصله کوتاه بالای نمایش
\abovedisplayskip	\فاصله بالای نمایش
\abstractname	\عنوان چکیده
\accent	\اکسنت
\active	\فعال
\addcontentsline	\بیفرآس طرفه رست
\addpenalty	\اضافه بر جریمه
\address	\نشانی
\addtocontents	\بیفرآباه فهرست
\addtocounter	\اضافه بر شمارنده
\addtolength	\اضافه بربعد
\addvspace	\بیفرآفضای و
\adjdemerits	\تنظيم بد نمایی
\advance	\بیفرآبر
\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
\alsoname	\نام همچنین
\and	\و
\angle	\زاویه
\appendixname	\عنوان پیوست
\approx	\تقاریب
\arabic	\عربی
\arg	\آرگ
\arrayrulecolor	\رنگ خط جدول
\arraycolsep	\فاصله ستونهای آرایه
\arrayrulewidth	\ضخامت خط جدول

Continued on next page



Command in TeX or ETeX	Equivalent Persian Command
\arraystretch	\کشیدگی آرایه
\AtBeginDocument	\درآغازنوشتار
\AtEndDocument	\درپایان نوشتار
\AtEndOfClass	\درانتهای طبقه
\AtEndOfPackage	\درانتهای سبک
\author	\نویسنده
\backmatter	\مطلوب پشت
\backslash	\شکاف پشت
\badness	\بدنایی
\bar	\میله
\baselineskip	\فاصله کرسی
\baselinestretch	\کشش فاصله کرسی
\batchmode	\پردازش دسته ای
\begin	\مشروع
\beginL	\مشروع چپ
\beginR	\مشروع راست
\begingroup	\مشروع گروه
\belowdisplayshortskip	\فاصله کوتاه پایین نمایش
\belowdisplayskip	\فاصله پایین نمایش
\bf	\سیاه
\bfdefault	\پیش فرض سیاه
\bfseries	\شمايل سیاه
\bgroup	\شرگروه
\bibitem	\مرجوع
\bibliography	\کتاب نامه
\bibliographystyle	\سبک کتاب نامه
\bibname	\عنوان کتاب نامه
\bigskip	\پرش بلند
\bigskipamount	\مقدار پرش بلند
\botfigrule	\خط پایین شناور
\botmark	\علامت پایین
\bottompageskip	\کادر تا پایین
\bottomfraction	\نسبت پایین
\box	\کادر
\boxmaxdepth	\حداکثر عمق کادر
\break	\ بشکن
\bullet	\ گلوله
\@cclv	\ادوپن@پنج
\@cclvi	\ادوپن@شش
\caption	\شرح
\catcode	\کدرده
\cc	\رونوشت
\ccname	\نام رونوشت

Continued on next page



Command in TeX or ETeX	Equivalent Persian Command
\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	\ برسی فرمان
\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 خروجی
\closeout	\ بستن
\closing	\ حریمه سربند
\clubpenalty	\ خاج
\clubsuit	\ علامت پایین ستون اول
\colbotmark	\ علامت اول ستون اول
\colfirstmark	\ رنگ
\color	\ کادر رنگ
\colorbox	\ علامت بالای ستون اول
\coltopmark	\ رنگ ستون
\columncolor	\ بین ستون
\columnsep	\ پهنای ستون
\columnwidth	\ خطیبین ستون
\columnseprule	\ سطر فهرست
\contentsline	\ عنوان فهرست مطالب
\contentsname	\ کپی
\copy	\ حق تالیف
\copyright	\ شمار
\count	\ شمار @
\count@	\ تعریف شمار
\countdef	\ سخ
\cr	\ سخ سخ
\crcr	\ نام فرمان
\csname	\

Continued on next page



Command in TeX or ETeX	Equivalent Persian Command
\CurrentOption	\گزینه حاری
\dashbox	\کادر بینایین
\dashv	\بینایین ع
\@date	\@تاریخ
\date	\تاریخ
\day	\روز
\dblbotfigrule	\خط پایین شناور پهن
\dblbottomfraction	\نسبت پهن پایین
\dblfigrule	\خط بالای شناور پهن
\dblfloatpagefraction	\نسبت صفحه شناور پهن
\dblfloatsep	\فاصله بین شناور پهن
\dblfntlocatecode	\اکد مکان غیر همان طور
\dbltextfloatsep	\فاصله متن و شناور پهن
\dbltopfraction	\نسبت پهن بالا
\DeclareFixedFont	\اعلان قلم ثابت
\DeclareGraphicsExtensions	\اعلان پسوند گرافیک
\DeclareGraphicsRule	\اعلان دستور گرافیک
\DeclareOldFontCommand	\اعلان فرمان قلم قدیمی
\DeclareOption	\اعلان گزینه
\DeclareRobustCommand	\اعلان فرمان قوی
\DeclareSymbolFont	\اعلان قلم علائم
\deadcycles	\دور بسته
\def	\اتر
\define@key	\تعريف @ کلید
\definecolor	\تعريف رنگ
\deg	\درجہ
\delcode	\اکد ج داساز
\delimiter	\اج داساز
\delimiterfactor	\اضریب ج داساز
\depth	\اگودی
\diamondsuit	\اختت
\dim	\ابعاد
\dimen	\بعد
\dimen@	@ بعد
\dimen@i	\بعد @ یک
\dimen@ii	\بعد @ دو
\dimendef	\تعريف بعد
\discretionary	\تیره گذاری
\displaybreak	\اشکست نمایش
\displayindent	\تورفتگی نمایش
\displaystyle	\سبک نمایش
\displaywidth	\عرض نمایش
\divide	\ تقسیم

Continued on next page



Command in TeX or ETeX	Equivalent Persian Command
\documentclass	\طبقه نوشتار
\do	\اكن
\dospecials	\اتعويض کدها
\dot	\نقطه
\doteq	\نقطه مساوى
\dotfill	\پر نقطه ا
\dots	\نقط
\doublebox	\کادر دولا
\doublerulesepcolor	\رنگ فاصله دو خط جدول
\doublerulesep	\فاصله بین دو خط
\downarrow	\فلش پايان
\dp	\عمق
\dump	\تخليه
\edef	\ترگ
\egroup	\پاگروه
\eject	\انتهای فاصله
\else	\گرنه
\em	\تاکيد
\emergencystretch	\کشش لاجرم
\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	\ته 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	\اكمک خطا

Continued on next page



Command in TeX or ETeX	Equivalent Persian Command
\errmessage	\پیام خطأ
\errorcontextlines	\اسطربمن خطأ
\errorstopmode	\پردازش توقف خطأ
\escapechar	\نویسه ویژه
\euro	\یورو
\evensidemargin	\حاشیه زوج
\everycr	\هر سخ
\everydisplay	\هنر مایش
\everyhbox	\هر کادر ا
\everyjob	\هر کار
\everymath	\هر ریاضی
\everypar	\هر بند
\everyvbox	\هر کادر و
\ExecuteOptions	\اجرای گزینه ها
\exhyphenpenalty	\جریمه 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	\اگر
\figurename	\عنوان شکل
\filbreak	\پرسکن
\fill	\پر
\firstmark	\علامت اول
\flat	\پهن
\floatpagefraction	\نسبت صفحه شناور
\floatingpenalty	\جریمه شناور
\floatsep	\فاصله بین شناور
\flushbottom	\تنظیم از پایین
\fmtname	\شكل بندی
\fmtversion	\ردہ شکل بندی
\fnsymbol	\نشانہ
\font	\قلم
\fontdimen	\بعد قلم
\fontencoding	\رمزینه قلم
\fontfamily	\فamil قلم

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Command in TeX or ETeX	Equivalent Persian Command
\fontname	\نام قلم
\fontseries	\شمايل قلم
\fontshape	\شكل قلم
\fontsize	\اندازه قلم
\footheight	\بلنداي پاين صفحه
\footins	\درج زيرنويس
\footnote	\ازيرنويس
\footnotemark	\علامت زيرنويس
\footnoterule	\خط زيرنويس
\footnotesep	\فاصله تازيرنويس
\footnotetext	\اندازه زيرنويس
\footskip	\متن زيرنويس
\frame	\فاصله تاپاين صفحه
\framebox	\فريم
\frenchspacing	\کادر باخت
\frontmatter	\فوائل يکنواخت لاتين
\futurelet	\مطلوب پيش
\@gobble	\بعدگدار
\@gobbletwo	@\خورحريصانه
\@gobblefour	@\خورحريصانه دو
\@gtempa	@\خورحريصانه چهار
\@gtempb	@\عاقت آ
\gdef	@\عاقت ب
\GenericInfo	\ترع
\GenericWarning	\الگوي اطلاع
\GenericError	\الگوي هشدار
\global	\الگوي خطا
\globaldefs	\عام
\glossary	\تعاريف عام
\glossaryentry	\لغت نامه
\goodbreak	\فقره فرهنگ
\graphpaper	\خوش شکن
\guillemotleft	\کاغذگراف
\guillemotright	\گيومه چپ
\guilsinglleft	\گيومه راست
\guilsinglright	\گيومه تکي چپ
\halign	\گيومه تکي راست
\hang	\رديف ا
\hangafter	\برو تو
\hangindent	\بعد از سطر
\badness	\تورفتگي ثابت
\hbox	\بدنيابي ا
	\کادرا

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Command in TeX or ETeX	Equivalent Persian Command
\headheight	\بلندای سرصفحه
\headsep	\افاصله از سرصفحه
\headtoname	\سر به نام
\heartsuit	\دل
\height	\بلندا
\hfil	\پرا
\hfill	\پررا
\hfilneg	\رفع پرا
\hfuzz	\پر زافقی
\hideskip	\افاصله مخفی
\hidewidth	\عرض پنهان
\hline	\خط پر
\hoffset	\حاشیه ا
\holdinginserts	\حفظ درج
\hrboxsep	\افاصله اگرد
\hrule	\خط ا
\rulefill	\پر خط ا
\hsize	\طول سطر
\hskip	\افاصله 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	\@گر کلاس فراخوانی شده
\@ifdefinable	\@گرترشدنی
\@ifnextchar	\@گرنویسه بعدی
\@ifpackageloaded	\@گرسیک فراخوانی شده
\@ifstar	\@گستاره
\@ifundefined	\@گرتعریف نشده
\if	\اگر
\if@tempswa	\اگر @ سواقت آ
\ifcase	\گرانواع
\ifcat	\گردد
\ifdefined	\گرتعریف شده
\ifdim	\اگر بعد
\ifeof	\اگر نه پرونده

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Command in TeX or ET <sub>E</sub> X	Equivalent Persian Command
\iff	\اگر
\iffalse	\اگرنا درست
\IfFileExists	\اگر پرونده موجود
\ifhbox	\اگر کادر
\ifhmode	\اگر حالت ا
\ifinner	\اگر درونی
\ifmmode	\اگر حالت ریاضی
\ifnum	\اگر عدد
\ifodd	\اگرفرد
\ifthenelse	\اگر آنگاه دیگر
\iftrue	\اگر درست
\ifvbox	\اگر کادر و
\ifvmode	\اگر حالت و
\ifvoid	\اگر تهی
\ifx	\اگر تام
\ignorespaces	\افاصله خالی راندیده بگیر
\immediate	\افوری
\include	\شامل
\includegraphics	\درج تصویر
\includeonly	\مشمولین
\indent	\توفتگی
\index	\در زمایه
\indexentry	\استعلام
\indexname	\عنوان نمایه
\indexspace	\فاصله رهنمای
\input	\ورودی
\InputIfFileExists	\ورود پرونده گرموجود
\inputlineno	\شماره سطر ورودی
\insert	\درج
\insertpenalties	\جریمه درج
\interfootnotelinepenalty	\جریمه بین سطرهای زیرنویس
\interdisplaylinepenalty	\جریمه بین سطرهای نمایش
\interlinepenalty	\جریمه بین سطرهای
\intertext	\متن داخلی
\intertextsep	\فاصله شناور در متن
\invisible	\امخفی
\itdefault	\پیش فرض ای
\itshape	\شکل ایتالیک
\item	\فقره
\itemindent	\توفتگی فقره
\itemsep	\فاصله فقره
\iterate	\تکرار کن
\itshape	\اشکل ای

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**Command in TeX or ET<sub>E</sub>X      Equivalent Persian Command**

\jobname	\نام کار
\jot	\قلپ
\kern	\دوری
\kill	\الگو
\label	\برچسب
\labelenumi	\برچسب شمارش یک
\labelenumii	\برچسب شمارش دو
\labelenumiii	\برچسب شمارش سه
\labelenumiv	\برچسب شمارش چهار
\labelitemi	\برچسب فقره یک
\labelitemii	\برچسب فقره دو
\labelitemiii	\برچسب فقره سه
\labelitemiv	\برچسب فقره چهار
\labelsep	\فاصله از برچسب
\labelwidth	\پنهانی برچسب
\language	\زبان
\large	\درشت
\Large	\ادرشت تر
\LARGE	\ادرشت درشت
\lastbox	\آخرین کادر
\lastkern	\آخرین دوری
\lastpenalty	\آخرین جریمه
\lastskip	\آخرین فاصله
\LaTeX	\لاتک
\LaTeXe	\لاتک ای
\lccode	\کدکوچک
\ldots	\نقاط خ
\leaders	\نشانگر
\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	\کادرتاچپ
\leftskip	\فاصله ابتدای سطر
\let	\بگذار
\line	\سطر
\linebreak	\سطرشکن

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Command in <b>T<sub>E</sub>X or E<sub>T</sub>E<sub>X</sub></b>	Equivalent Persian Command
\linepenalty	\حریمه سطر
\lineskip	\فاصله سطرها
\lineskiplimit	\حد فاصله سطر
\linespread	\کشش فاصله سطر
\linethickness	\ضخامت خط
\linewidth	\پهنهای سطر
\listfigurename	\عنوان فهرست اشکال
\listfiles	\لیست پرونده ها
\listoffigures	\فهرست اشکال
\listoftables	\فهرست جداول
\listparindent	\تورفتگی بند لیست
\listtablename	\عنوان فهرست جداول
\LoadClass	\بارکن طبقه
\LoadClassWithOptions	\بارکن طبقه با گزینه
\location	\مکان
\long	\بلند
\loop	\حلقه
\looseness	\گسیختگی
\lower	\انتقال پایین
\@makeother	\@دیگر
\@m	\@زار
\@M	\ده@زار
\@Mi	\ده@زاریک
\@Mii	\ده@زاردو
\@Miii	\ده@زارسه
\@Miv	\ده@زارچهار
\@MM	\بیس@زار
\m@ne	\من@ا
\mag	\بزرگ نمایی
\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

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Command in TeX or ETeX	Equivalent Persian Command
\marginparpush	\فاصله دو حاشیه
\marginparsep	\فاصله تا حاشیه
\marginparwidth	\پهنای حاشیه
\mark	\علامت
\markboth	\علامت در دو طرف
\markright	\علامت در راست
\mathaccent	\اعرب ریاضی
\mathchar	\نویسه ریاضی
\mathchardef	\تعریف نویسه ریاضی
\mathcode	\کد ریاضی
\mathrm	\ریاضی رومان
\maxdeadcycles	\حداکثر تکرار
\maxdepth	\حداکثر عمق صفحه
\maxdimen	\بعدیشین
\mbox	\کادر بی
\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 برآست
\mskip	\فاصله ریاضی
\@th	\ری@ضی
\multicolumn	\چندستونی
\multiply	\ضرب
\multispan	\چندادغام
\muskip	\میوفاصله
\muskipdef	\تعریف میوفاصله
\@namedef	\@ترنام
\@nameuse	\@کاربردنام
\@ne	\یک@
\name	\نام
\natural	\طبیعی
\nearrow	\باریک
\nearrower	\باریکتر

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Command in TeX or ETeX	Equivalent Persian Command
\NeedsTeXFormat	\شکلندی 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	\شماره جدید
\newcounter	\شمارنده جدید
\newdimen	\بعد جدید
\newenvironment	\محیط نو
\newfam	\خانواده جدید
\newfont	\قلم نو
\newhelp	\کمک جدید
\newif	\اگر جدید
\newinsert	\درج جدید
\newlabel	\برچسب جدید
\newlength	\تعريف بعد جدید
\newline	\سطر جدید
\newlinechar	\نویسه سطر جدید
\newmuskip	\میواصله جدید
\newpage	\صفحه جدید
\newread	\بخوان جدید
\newsavebox	\تعريف کادر جدید
\newskip	\فاصله جدید
\newtheorem	\قضیه جدید
\newtoks	\جزء جدید
\newwrite	\بنویس جدید
\noalign	\بی ردیف
\nobreak	\نشکن
\nobreakspace	\فاصله نشکستی
\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	\فواصل متعارف لاتین
\nonumber	\بدون شماره
\nopagebreak	\صفحه نشکن

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Command in $\text{\TeX}$ or $\text{\LaTeX}$	Equivalent Persian Command
<code>\normalbaselines</code>	\کرسيهای متعارف
<code>\normalbaselineskip</code>	\فاصله کرسی متعارف
<code>\normalcolor</code>	\رنگ عادی
<code>\normalfont</code>	\قلم عادی
<code>\normallineskip</code>	\فاصله سطرمتعارف
<code>\normallineskiplimit</code>	\حدفاصله سطرمتعارف
<code>\normalmarginpar</code>	\درحاشیه عادی
<code>\normalsize</code>	\اندازه عادی
<code>\notag</code>	\ بدون اتيكت
<code>\null</code>	\اول
<code>\nullfont</code>	\قلم تهی
<code>\number</code>	\عدد
<code>\numberline</code>	\سطر عددی
<code>\numberwithin</code>	\شماره مطابق
<code>\@evenfoot</code>	\پایین صفحه زوج
<code>\@evenhead</code>	\بالای صفحه زوج
<code>\@oddfoot</code>	\پایین صفحه فرد
<code>\@oddhead</code>	\بالای صفحه فرد
<code>\@outeqnttrue</code>	\شماره بیرون درست
<code>\@outeqnfase</code>	\شماره بیرون نادرست
<code>\obeylines</code>	\سطر به سطر
<code>\obeyspaces</code>	\فضاعل
<code>\oddsidemargin</code>	\حاشیه فرد
<code>\offinterlineskip</code>	\سطور بی فاصله
<code>\omit</code>	\حذف
<code>\@onlypreamble</code>	\@ تنها در پیش در آمد
<code>\onecolumn</code>	\یک ستون
<code>\onlynotes</code>	\تنها یادداشت ها
<code>\onlyslides</code>	\تنها اسلاید ها
<code>\openin</code>	\بارگذاری ورودی
<code>\openout</code>	\بارگذاری خروجی
<code>\OptionNotUsed</code>	\گزینه مصرف نشده
<code>\or</code>	\یا
<code>\outer</code>	\برونی
<code>\output</code>	\صفحه بندی
<code>\outputpenalty</code>	\جریمه صفحه بندی
<code>\overfullrule</code>	\علامت سرریز
<code>\@preamblecmds</code>	\@ فرمان های پیش در آمد
<code>\p@</code>	\@ پو
<code>\PackageError</code>	\خطای سبک
<code>\PackageInfo</code>	\اطلاع سبک
<code>\PackageWarning</code>	\هشدار سبک
<code>\PackageWarningNoLine</code>	\هشدار سبک بی سطر

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Command in TeX or ETeX	Equivalent Persian Command
\pagebreak	\صفحه شکن
\pagecolor	\رنگ صفحه
\pagedepth	\عمق صفحه
\pagefillstretch	\کشش پر رصفحه
\pagefillstretch	\کشش پر رصفحه
\pagefilstretch	\کشش پر رصفحه
\pagegoal	\غايت صفحه
\pagename	\نام صفحه
\pagenumbering	\شماره گذاري صفحه
\pageref	\رجوع صفحه
\pagerulewidth	\ضخامت خط صفحه
\pageshrink	\فشردگي صفحه
\pagestretch	\کشش صفحه
\pagestyle	\سبك صفحه
\pagetotal	\جمع صفحه
\paperheight	\بلنداي کاغذ
\paperwidth	\پهنای کاغذ
\par	\بند
\paragraph	\پاراگراف
\parallel	\موازي
\parbox	\کادر پار
\parfillskip	\فاصله ته بند
\parindent	\تورفتگي سربند
\parsep	\فاصله بند ليست
\parshape	\شكل بند
\parskip	\فاصله بند
\part	\بخش
\partname	\عنوان بخش
\partopsep	\فاصله بالاي ليست بند
\PassOptionToClass	\ارسال گزينه به کلاس
\PassOptionToPackage	\ارسال گزينه به پکیج
\path	\مسیر
\patterns	\الگوها
\pausing	\مکث
\penalty	\جريمه
\phantom	\غيب
\poptabs	\الگوي قبلی
\postdisplaypenalty	\جريمه پس نمايش
\predisplaydirection	\جهت پيش نمايش
\predisplaypenalty	\جريمه پيش نمايش
\predisplaysize	\اندازه پيش نمايش
\pretolerance	\پيش حدود نمايي
\prevdepth	\عمق قبلی

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Command in TeX or ET <sub>E</sub> X	Equivalent Persian Command
\prevgraf	\بندقبلي
\printindex	\انمايه دراينجا
\ProcessOptions	\پردازش گزينه ها
\protect	\تامين
\providecommand	\اتهيه فرمان
\ProvidesClass	\آماده سازی طبقه
\ProvidesFile	\آماده سازی پرونده
\ProvidesPackage	\آماده سازی سبک
\pushtabs	\ثبت الگو
\quad	\کواد
\quad\quad	\کوکواد
\@outputpagerestore	\@بازآيی خروج صفحه
\radical	\راديكال
\raggedbottom	\پايين بي تنظيم
\raggedleft	\تنظيم ازراست
\raggedright	\تنظيم ازچپ
\raise	\انتقال ببالا
\raisebox	\بالابر
\raisetag	\ترفيع اتيكت
\rangle	\زاويه ر
\rceil	\اسفر
\read	\بخوان
\ref	\رجوع
\reflectbox	\اکادرقرینه
\refname	\عنوان مراجع
\refstepcounter	\اگام شمارنده مرجع
\relax	\راحت
\removelastskip	\رفع آخرین فاصله
\renewcommand	\فرمان ازنو
\renewenvironment	\محيط ازنو
\repeat	\ازنو
\RequirePackage	\سبک موردنياز
\RequirePackageWithOptions	\سبک موردنياز با گزينه
\resizebox	\کادرکشide
\reversemarginpar	\ادرحاسيه معكوس
\rfloor	\کفر
\right	\راست
\rightmargin	\حاشيء راست
\rightmark	\علامت راست
\rightskip	\کادر تراست
\rmdefault	\فاصله انتهاي سطر
\rmfamily	\روماني عادي

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Command in TeX or ETeX	Equivalent Persian Command
\Roman	\رومی بزرگ
\roman	\رومی کوچک
\romannumeral	\اعدرومی
\rotatebox	\کادرچرخان
\rowcolor	\رنگ ردیف
\rule	\خط
\@secondoftwo	\@دومی از دو
\@spaces	\فضاهای
\samepage	\همین صفحه
\savebox	\مقدار کادر
\sbox	\مقادیر
\scalebox	\کادر اندازه
\scdefault	\پیش فرض تمام بزرگ
\scshape	\شكل تمام بزرگ
\scriptfont	\قلم توان
\scriptscriptfont	\قلم توان توان
\scriptscriptstyle	\سبک ته نوشت ته نوشت
\scriptsize	\اندازه پانویس
\scriptstyle	\سبک ته نوشت
\scrollmode	\پردازش گذرنی
\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 کلیدها
\setlength	\مقدار بعد
\setminus	\تنظيم منها
\SetSymbolFont	\تعريف قلم علائم
\settodepth	\تنظيم به عمق
\settoheight	\تنظيم به ارتفاع
\settowidth	\مقدار بعدیه اندازه
\sfcode	\کد ضریب فاصله
\sfdefault	\پیش فرض س ف
\sffamily	\فamilی سن سریف
\shadowbox	\کادر سایه دار
\sharp	\تبیز
\shipout	\بفرست
\shortstack	\پیشه کوتاه

Continued on next page



**Command in TeX or ETeX    Equivalent Persian Command**

\show	\نمایش بده
\showbox	\نمایش بده کادر
\showboxbreadth	\میزان نمایش کادر
\showboxdepth	\عمق نمایش کادر
\showlists	\نمایش بده لیستها
\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	\پرش کوتاه
\smallskipamount	\مقدار پرش کوتاه
\smash	\کوب
\smile	\الخند
\snglfntlocatecode	\کدمکان 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	\رشه
\strut	\شمع
\strutbox	\کادر شمع
\subitem	\زیریند
\subparagraph	\زیر پاراگراف
\subsection	\زیر قسمت
\substack	\زیر پیشه
\subsubitem	\زیر زیریند
\subsubsection	\زیر زیر قسمت

*Continued on next page*



**Command in TeX or ET<sub>E</sub>X      Equivalent Persian Command**

\subset	\زیرمجموعه
\subseteqq	\زیرمجموعه مس
\supereject	\امنهای صفحه
\suppressfloats	\حذف مکان شناور
\@tempa	\@موقت آ
\@tempb	\@موقتب
\@tempc	\@موقتب پ
\@tempd	\@موقتب ت
\@temppe	\@موقتب ث
\@tempboxa	\@کادرقت آ
\@tempcnta	\@شماقت آ
\@tempcntb	\@شماقت ب
\@tempdima	\@بعدقت آ
\@tempdimb	\@بعدقت ب
\@tempdimc	\@بعدقت پ
\@tempskipa	\@فاقت آ
\@tempskipb	\@فاقت ب
\@tempswafalse	\@سواقت آنادرست
\@tempswatrue	\@سواقت آدرست
\@temptokena	\@جزقت آ
\@thefnmark	\انگ زیرنویس
\@thirdofthree	\سومی ازسه
\tabbingsep	\فاصله جاگذاری
\tabcolsep	\فاصله بین ستونها
\tableofcontents	\فهرست مطالب
\tablename	\عنوان جدول
\tabskip	\فاصله ستونها
\tabularnewline	\ته سطرجدول
\tag	\اتیکت
\telephone	\تلفن
\TeX	\تک
\text	\متن
\textbullet	\گلوله متنی
\textfont	\قلم متن
\textemdash	\ام دش متنی
\textendash	\ان دش متنی
\textexclamdown	\تعجب وارونه متنی
\textperiodcentered	\ نقطه وسط متنی
\textquestiondown	\سوال وارونه متنی
\textquotedblleft	\نقل چپ متنی دولا
\textquotedblright	\نقل راست متنی دولا
\textquoteright	\نقل متنی چپ
\textquoteright	\نقل متنی راست

*Continued on next page*



Command in TeX or ETeX	Equivalent Persian Command
\textvisiblespace	\فضای نمایان متنی
\textbackslash	\شکافت پشت متنی
\textbar	\میله متنی
\textgreater	\بزرگ تر متنی
\textless	\کمتر متنی
\textbf	\متن 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 تورفتہ
\textit	\متن ایتالیک
\textmd	\متن نازک
\textnormal	\متن نرمال
\textregistered	\ثبتی متنی
\textrm	\متن رومن
\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	\پهنه ای متن
\thanks	\زیرنویس عنوان
\the	\محتوای
\thempfn	\این زیرنویس
\thicklines	\خط هاضخیم
\thickmuskip	\فاصله زیاد ریاضی
\thinmuskip	\فاصله کم ریاضی
\thickspace	\فضاضخیم
\thinlines	\خط هناری
\thinspace	\دوری کوچک
\thisfancypage	\این صفحه تجملی
\thispagestyle	\سیک این صفحه
\thr@0	@سه\
\tilde	مد\
\tiny	ظریف\
\time	زمان\
\times	ضرب در\

Continued on next page



**Command in TeX or ETeX      Equivalent Persian Command**

\title	\عنوان
\to	\به
\today	\امروز
\toks	\جزء
\toksdef	\تعريف جزء
\tolerance	\حدبدنمايی
\top	\بالا
\topfigrule	\خط بالاي شناور
\topfraction	\نسبت بالا
\topmargin	\حاشيه بالا
\topmark	\علامت بالا
\toppageskip	\کادر تابلا
\topsep	\فاصله بالاي ليست
\topskip	\فاصله بالا
\totalheight	\بلندای کل
\tracingall	\ردگيري کل
\tracingcommands	\ردگيري فرامين
\tracinglostchars	\ردگيري حروف
\tracingmacros	\ردگيري ماکروها
\tracingonline	\ردگيري نمایشی
\tracingoutput	\ردگيري صفحه بندی
\tracingpages	\ردگيري صفحات
\tracingparagraphs	\ردگيري بندها
\tracingrestores	\ردگيري بازگردانی
\tracingstats	\ردگيري آمارها
\triangle	\مثلث
\ttdefault	\پيش فرض تايپ
\ttfamily	\فamil تايپ
\tw@	@\دو
\twocolumn	\دوستون
\typein	\درنويس
\typeout	\برنويس
\uccode	\كدبزرگ
\uchyph	\تيره بندی بزرگ
\undefined	\تعريف نشده
\underline	\ازيرخط
\unhbox	\بي کادر
\unhcopy	\بي کپي
\unitlength	\ واحد طول
\unkern	\برگشت دورى
\unpenalty	\برگشت جريمه
\unskip	\برگشت فاصله
\unvbox	\بي کادرو

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Command in TeX or ETeX	Equivalent Persian Command
\unvcopy	\ابی کپی و
\updefault	\پیش فرض ایستاده
\upshape	\اشکل ایستاده
\usebox	\ازکار
\usecounter	\باشمارشگر
\usefont	\اگزینش قلم
\usepackage	\سبک لازم
\@vobeyspaces	\فضاهای فعال @\
\@void	\@تهی
\vadjust	\تنظیم و
\valign	\ردیف و
\value	\محتوای شمارنده
\vbadness	\بدنمایی و
\vbox	\کادرو
\vcenter	\کادرو سط
\verb	\همانطور
\vfil	\پرو
\vfill	\پررو
\vfilneg	\رفع پرو
\vfuzz	\پر زعمودی
\visible	\نمایان
\vline	\خط عمود
\voffset	\حاشیه و
\voidb@x	\ک@درتهی
\vpageref	\ارجاع صفحه ع
\vrboxsep	\فاصله و گرد
\vref	\ارجاع ع
\vrule	\خط و
\vsized	\طول صفحه
\vskip	\فاصله و
\vspace	\فضای و
\vsplit	\شکست و
\vss	\هردو
\vtop	\کادرگرد
\wd	\عرض
\whiledo	\مادام بکن
\widehat	\کلاه پهن
\widetilde	\مد پهن
\widowpenalty	\جریمه ته بند
\width	\پهنا
\wlog	\در کارنامه
\write	\بنویس
\@xobeysp	\فضای لاتین @\

Continued on next page



Command in TeX or ETeX	Equivalent Persian Command
\@xxxii	\سی@دو
\xdef	\ترجم
\xleaders	\نشانگرگسترشی
\xspaceskip	\فاصله اضافی کلمات
\year	\سال
\z@	\فر
\z@skip	\فراصله@\

Table 2: The Equivalent XePersian Commands

Command in XePersian	Equivalent Persian Command
\autofootnoterule	\خط زیرنویس خودکار
\AutoMathDigits	\اعداد فرمولهای خودکار
\DefaultMathDigits	\اعداد فرمولهای لاتین
\deflatinfont	\تعريف قلم لاتین
\defpersianfont	\تعريف قلم پارسی
\hboxL	\کادر اچپ
\hboxR	\کادر راست
\keyval@eq@alias@key	\معادل@کلید
\Latincite	\مرجع لاتین
\latinfont	\قلم لاتین
\latintoday	\امروز لاتین
\leftfootnoterule	\خط زیرنویس چپ
\lr	\متن لاتین
\LRE	\چپ بر است
\LTRdblcol	\دوسنونی چپ
\LTRfootnote	\پانویس
\LTRfootnotetext	\متن پانویس
\LTRthanks	\پانویس عنوان
\persianday	\روز پارسی
\persianfont	\قلم پارسی
\PersianMathDigits	\اعداد فرمولهای 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	\دوسنونی راست
\RTLfootnote	\پانوشت

Continued on next page



Command in XePersian	Equivalent Persian Command
\RTLfootnotetext	\متن پانوشت
\RTLthanks	\پانوشت عنوان
\@SepMark	\علامت بین
\SepMark	\علامت بین
\setdefaultbibitems	\بگذارم رجوعات 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 رجوعات چپ
\setLTRmarginpar	\بگذار در حاشیه چپ
\setRTL	\بگذار متن راست
\setRTLbibitems	\بگذار رجوعات راست
\setRTLmarginpar	\بگذار در حاشیه راست
\settextfont	\گزینش قلم متن
\textwidthfootnoterule	\خط زیرنویس پهنای متن
\twocolumnstableofcontents	\فهرست مطالب دو ستونی
\unsetfootnoteRL	\انگذار زیرنویس راست
\unsetLTR	\انگذار متن چپ
\unsetRTL	\انگذار متن راست
\vboxL	\کادر واژچپ
\vboxR	\کادر واژ راست
\XeLaTeX	\ازی لاتک
\XePersian	\ازی پرشین
\xepersianversion	\اگونه زی پرشین
\xepersiandate	\تاریخ گونه زی پرشین
\XeTeX	\ازی تک

Table 3: The Equivalent L<sup>A</sup>T<sub>E</sub>X Environments

Environment in L <sup>A</sup> T <sub>E</sub> X	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 *

*Continued on next page*



Environment in L <sup>A</sup> T <sub>E</sub> X	Equivalent Persian Environment
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	انباشت
picture	تصویر
quotation	اقتباس
quote	نقل
slide	اسلاید
sloppypar	پارتا مرتب
split	شکافتن
subarray	زیر آرایه
tabbing	جاگذاری
table	لوح
table*	*لوح
tabular	جدول
tabular*	*جدول
thebibliography	مراجع
theindex	محتوای نمایه
titlepage	صفحه عنوان
trivlist	لیست بدروی
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	دسته بندی چپ
persian	پارسی

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Environment in XePersian	Equivalent Persian Environment
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<sup>A</sup>T<sub>E</sub>X position arguments

Position argument in L <sup>A</sup> T <sub>E</sub> X	Equivalent Persian position argument
b	ز
c	و
C	س
h	ا
H	آ
J	ت
l	چ
L	ف
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).

#### 2.4.8 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>	پیش نویس
<code>origin</code>	مبدأ
<code>clip</code>	بی اضافه
<code>keepaspectratio</code>	حفظ تناسب
<code>natwidth</code>	پهنانی طبیعی
<code>natheight</code>	بلندای طبیعی
<code>bb</code>	مختصات
<code>viewport</code>	محدوده نمایش

*Continued on next page*



Original Key	Equivalent Persian Key
trim	حذف اطراف
angle	زاویه
width	پهنا
height	بلندا
totalheight	بلندای کل
scale	ضریب
type	نوع
ext	پسوند
read	خواندنی
command	فرمان
x	طول
y	عرض
units	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

#### 2.4.9 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

*Continued on next page*



Original font feature	Equivalent Persian font feature
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
Opacity	کدری
Mapping	نگاشت
Weight	سنگینی
Width	پهنا
OpticalSize	اندازه چشمی
FakeSlant	خوابیده تقلی
FakeStretch	کشش تقلی
FakeBold	سیاه تقلی
AutoFakeSlant	خوابیده تقلی خودکار
AutoFakeBold	سیاه تقلی خودکار
Ligatures	دو با چند حرف متصل به هم
Alternate	متناوب
Variant	گوناگون
Variant	مجموعه سبکی
CharacterVariant	گوناگونی نویسه
Style	سبک
Annotation	یادداشت
RawFeature	ویرگی های کال
CharacterWidth	پهنا نویسه
Numbers	ارقام
Contextuals	متخی
Diacritics	تفکیک کننده ها
Letters	حروف
Kerning	دوری
VerticalPosition	موقعیت عمودی
Fractions	كسر

Table 9: Persian Equivalent font feature options

font feature	font feature option	Persian font feature option
Language	Default	پیش فرض

Continued on next page



<b>font feature</b>	<b>font feature option</b>	<b>Persian font feature option</b>
Language	Parsi	پارسی
Script	Parsi	پارسی
Script	Latin	لاتین
Style	MathScript	اسکریپت ریاضی
Style	MathScriptScript	اسکریپت اسکریپت ریاضی

## 2.5 A Sample Input T<sub>E</sub>X 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] {\langle font name\rangle}
\setlatintextfont [Options] {\langle font name\rangle}
\setmathdigitfont [Options] {\langle font name\rangle}
\setmathsfdigitfont [Options] {\langle font name\rangle}
\setmathttdigitfont [Options] {\langle font name\rangle}

```

☞ 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<sub>E</sub>X 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 TeX 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 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>}  
\navarfamiliy \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>\dots\end{latinitems}
```

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

```
\begin{parsiitems}\item <text>\dots\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<sup>A</sup>T<sub>E</sub>X offers. These counters are `harfi`, `adadi`, and `tartibi`. In addition, the following commands are also provided:

```
\harfinumeral{\text{}} \adadinumeral{\text{}} \tartibinumeral{\text{}}
```

- ☞ 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 `<integer>`, where  $1 \leq \text{integer} \leq 32$  and `\adadinumeral`, and `\tartibinumeral` return `adadi`, and `tartibi` form of `<integer>` respectively, where  $0 \leq \text{integer} \leq 999, 999, 999$ .

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

```
\DefaultMathDigits \PersianMathDigits \AutoMathDigits
```

- ☞ 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, `\AutoMathDigits` 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 `\PersianMathDigits` anywhere, you will overwrite XePersian's default behaviour and you will always get Persian digits in math mode.
- ☞ If you use `\DefaultMathDigits` 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

```
\ifwriteviii
  (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 `algorithm`, `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`, `۱`, or `ت` 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`, `۱`, `ت` 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 create<sup>2</sup> a magazine just load the class as usual<sup>3</sup>, 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 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.

---

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

<sup>3</sup>You 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 math formulas. For more detail see [section 2](#) of the documentation.



```
\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}{\langle num-of-columns\rangle}{\langle title\rangle}{\langle subtitle\rangle}{\langle pagesof\rangle}{\langle label\rangle}\\ ...{\langle text\rangle}...\\ \end{article}
```

The first argument  $\langle num-of-columns\rangle$  sets the number of columns the article will be divided whereas  $\langle label\rangle$  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{\langle author\rangle}{\langle place\rangle}` inserts the name of the editor and the place where the article happened in the way many magazines do. Another useful command is `\timestamp{\langle time\rangle}` 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{\langle image\rangle}{\langle description\rangle}
```

```
\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{\text{type}}{\text{text}}
\expandedtitle{\text{type}}{\text{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}{\text{num-of-columns}}{\text{title}}{\text{author}}{\text{label}}
...{\text{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. 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}{\text{num-of-columns}}{\text{title}}{\text{subtitle}}{\text{label}}
...{\text{text}}...
\shortarticleitem{\text{title}}{\text{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 `\text{section name}`. From the point it is used, all articles which follow will be grouped within the new section.

```
\newsection{\text{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<sup>A</sup>T<sub>E</sub>X 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<sup>A</sup>T<sub>E</sub>X 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 `\text{}` 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<sup>A</sup>T<sub>E</sub>X. 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<sup>A</sup>T<sub>E</sub>X 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<sup>A</sup>T<sub>E</sub>X 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 `LATEX` 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.

