

The XePersian Package



Persian for L^AT_EX 2_E over XeT_EX

Vafa Khalighi
simurgh12@gmail.com

April 13, 2012 Version 11.137

Contents

1	Introduction	2		
1.1	Important Notes	2	2.6.1 Kashida Option	5
1.2	XePersian Info On The Terminal and In The Log File	3	2.6.2 quickindex Option	6
2	Basics	3	2.6.3 localise Option	6
2.1	Loading The Package	3	2.6.4 Localizations of the keys and key values of graphicx package	34
2.2	XePersian's Symbol	4	2.6.5 Localizations of font features and font feature options	35
2.3	Version of XePersian package	4	2.7 A Sample Input T _E X File	36
2.4	Commands for Version number, and Date of The Package	5	2.8 Font Commands	37
2.5	Options of The Package	5	2.8.1 Basic Font Commands	37
2.6	extrafootnotefeatures Option	5		

2.8.2	Defining Extra Persian and Latin Fonts	38	5.3	Converting Your Farsi \TeX Files To XePersian or Unicode	42
2.8.3	Choosing Persian Sans Font	39	6	Extra Packages And Classes	43
2.8.4	Choosing Persian Mono Font	39	6.1	Magazine Typesetting	43
2.8.5	Choosing Persian Iranic Font	39	6.1.1	Introduction	43
2.8.6	Choosing Persian Navar Font	39	6.1.2	Usage	43
2.8.7	Choosing Persian Pook Font	39	6.1.3	Front Page	44
2.8.8	Choosing Persian Sayeh Font	39	6.1.4	Inside	45
2.8.9	Choosing Latin Sans Font	39	6.1.5	The article environment	46
2.8.10	Choosing Latin Mono Font	39	6.1.6	The editorial environment	47
3	Latin and Persian Environment	39	6.1.7	The shortarticle environment	47
3.1	Short Latin and Persian Texts	40	6.1.8	Commands between articles	47
3.2	Miscellaneous Commands	40	6.1.9	Customization	48
3.3	New Commands	40	6.1.10	Front Page	48
3.4	Additional Counters	40	6.1.11	Inside The Magazine	49
3.5	Things To Know About \setdigitfont, \setmathsf digitfont, and \setmathtt digitfont	41	6.1.12	Class Options	50
4	New Conditionals	42	6.2	Typesetting Multiple-choice Questions	51
4.1	Shell escape (or write18) conditional	42	6.2.1	Introduction	51
5	Bilingual Captions	42	6.2.2	Usage	51
5.1	Support For Various Packages	42	6.2.3	Loading The Package	51
5.1.1	Things You Should Know about Support For enumerate Package	42	6.2.4	Creating Questions	51
5.2	Index Generation	42	6.2.5	The question Environment	51
			6.2.6	Question Numbers	52
			6.2.7	The Form and the Mask	52
			6.2.8	Typesetting corrections	52
			6.2.9	Important Note	53
			6.3	Customising The Package	53
			6.3.1	The question environment	53
			6.3.2	The Form and the Mask	53
			6.3.3	The correction	53

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.
- ☞ To get help, please explore <http://forum.parsilatex.com> and ask your question there.

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 © 2008-2012 Vafa Khalighi
v11.137, 2012/05/01
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 2.5](#).

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.

- ② In fact, in addition to `bidi`, `XePersian` also makes sure that some specific packages are loaded before `bidi` and `XePersian`; these are those packages that `bidi` and `XePersian` modifies them for bidirectional and Persian/English type-setting.

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

For instance, consider the following minimal example:

```

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

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

```

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

```

See the xepersian package documentation for explanation.
Type H <return> for immediate help.
...
```

```
1.5 \begin{document}
```

```
? 
```

2.2 XePersian's Symbol

As you may know lion symbolizes T_EX but lion does not symbolizes `XePersian`. **Simorgh**¹ (shown on the first page of this documentation) symbolizes `XePersian`.

2.3 Version of XePersian package

Version of `XePersian` package tends to **12** and finally, the version number of `XePersian` package becomes **12**².

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>

²This is because number **12** has been a sacred number between Iranians since ancient times. For instance, in the battles of Rostam against Keykavous, Esfandyar against Arjasp, Goudarz for

2.4 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}
```

2.5 Options of The Package

There are three options:

2.6 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.

2.6.1 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 revenge of Siavash, and Bahram Mehran (Chobineh) against Turks, the number of Iranian army were 12000 and in all these battles, Iranians defeated enemy.

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.

2.6.2 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.

2.6.3 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{\langle command-name in Persian \rangle}{\langle original L ^A T _E X command-name \rangle}
\eqenvironment{\langle environment-name in Persian \rangle}{\langle original L ^A T _E X environment-name \rangle}

Table 1: The Equivalent L^AT_EX and T_EX Commands

Command in T _E X or L ^A T _E X	Equivalent Persian Command
\@arstrut	\شمع جدول
\above	\فوق
\abovedisplayshortskip	\فاصله کوتاه بالای نمایش
\abovedisplayskip	\فاصله بالای نمایش
\abstractname	\عنوان چکیده
\accent	\اکسنت
\active	\فعال
\addcontentsline	\یفزاسطر فهرست
\addpenalty	\اضافه برجirimه
\address	\نشانی
\addtocontents	\یفزابه فهرست
\addtocounter	\اضافه بر شمارنده
\addtolength	\اضافه برعده
\addvspace	\یفزایضای و
\adjdemerits	\تنظیم بدنمایی
\advance	\یفزایر
\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
\also name	\نام همچنین
\and	\و
\angle	\زاویه
\appendixname	\عنوان پیوست
\approx	\تقریب
\arabic	\عربی
\arg	\آرگ

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\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 اننهای طبقه
\AtEndOfPackage	\در اننهای سبک
\author	\نویسنده
\backmatter	\مطلوب پشت
\backslash	\شکاف پشت
\badness	\بدنامی
\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 کوتاه پایین نمایش
\belowdisplayskip	\فاصله پایین نمایش
\bf	\سیاه
\bfdefault	\پیش فرض سیاه
\bfseries	\شمایل 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
\bottomskip	\کادر تا پایین
\bottomfraction	\نسبت پایین
\box	\کادر
\boxmaxdepth	\حداکثر عمق کادر
\break	\بسکن
\bullet	\گلوله \

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\@cclv	\ادوپن@پنج
\@cclvi	\ادوپن@شش
\caption	\شرح
\catcode	\اکردد
\cc	\رونوشت
\ccname	\نامرونوشت
\cdot	\ نقطه وسط
\cdots	\ نقاط وسط
\centering	\ تنظیم از وسط
\centerline	\ خط وسط
\ch@ck	\چک@ن
\chapter	\فصل
\chaptername	\عنوان فصل
\char	\نویسه
\chardef	\تعریف نویسه
\CheckCommand	\بررسی فرمان
\cite	\مرجع
\ClassError	\خطای طبقه
\ClassInfo	\اطلاع طبقه
\ClassWarning	\هشدار طبقه
\ClassWarningNoLine	\هشدار طبقه سطر
\cleaders	\نشانگر مرکزی
\cleardoublepage	\دو صفحه پاک
\clearpage	\صفحه پاک
\cline	\خطناپر
\closein	\بند و رو دی
\closeout	\بند خروجی
\closing	\بستن
\clubpenalty	\جریمه سربند
\clubsuit	\جاج
\colbotmark	\علامت پایین ستون اول
\colfirstmark	\علامت اول ستون اول
\color	\رنگ
\colorbox	\کادر رنگ
\coltopmark	\علامت بالای ستون اول
\columncolor	\رنگ ستون
\columnsep	\بین ستون
\columnwidth	\پهنه ای ستون
\columnseprule	\خط بین ستون
\contentsline	\سطر فهرست

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\contentsname	\عنوان فهرست مطالب
\copy	\کپی
\copyright	\حق تالیف
\count	\شمار
\count@	\شمار @
\countdef	\تعريف شمار
\cr	\سخ
\crcr	\سخ سخ
\csname	\نام فرمان
\CurrentOption	\گزینه جاری
\dashbox	\کادر بینایی
\dashv	\بینایی نع
\@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	\کد ممکان غیره مانطور
\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	\تر
\define@key	\تعريف @ کلید
\definecolor	\تعريف رنگ
\deg	\درجہ
\delcode	\کد حدا ساز
\delimiter	\حدا ساز
\delimiterfactor	\ضریب حدا ساز
\depth	\گودی
\diamondsuit	\خش

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\dim	\بعداد
\dimen	\بعد
\dimen@	@\بعد
\dimen@i	\بعد@یک
\dimen@ii	\بعد@دو
\dimendef	\تعريفبعد
\discretionary	\تیرهگذاری
\displaybreak	\شکستنمايش
\displayindent	\تورفتگىنمايش
\displaystyle	\سیکنمايش
\displaywidth	\عرضنمايش
\divide	\تقسیم
\documentclass	\طبقهنوشتار
\do	\اكن
\dospecials	\تعویضکدها
\dot	\ نقطه
\doteq	\ نقطهمساوي
\dotfill	\ پر نقطها
\dots	\ نقاط
\doublebox	\ کادردولا
\doublerulesepcolor	\ رنگ فاصله دو خط جدول
\doublerulesep	\ فاصله بین دو خط
\downarrow	\ فلشپایین
\dp	\ عمق
\dump	\ تخلیه
\edef	\ ترگ
\egroup	\ پاگروه
\eject	\ انتهای فاصله
\else	\ اگرنه
\em	\ تاکید
\emergencystretch	\ کشش لاجرم
\emph	\ موکد
\empty	\ پوج@
\empty	\ پوج
\emptyset	\ مجموعه پوج
\end	\ پایان
\endL	\ پایان چپ
\endR	\ پایان راست
\endcsname	\ پایان نام فرمان
\endfirsthead	\ پایان اولین سر

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\endfoot	\پایان‌پا
\endgraf	\ته‌بند
\endgroup	\پایان‌گروه
\endhead	\پایان‌سر
\endinput	\پایان‌ورودی
\endlastfoot	\پایان‌آخرین‌پا
\enlargethispage	\گسترش‌این‌صفحه
\endline	\ته‌سطر
\endlinechar	\نویسه‌ته‌سطر
\enspace	\ان‌دوری
\enskip	\ان‌فاصله
\eqcommand	\فرمان‌جانشین
\eqenvironment	\محیط‌جانشین
\eqref	\رجاع‌فر
\errhelp	\کمک‌خطا
\errmessage	\پیام‌خطا
\errorcontextlines	\سطرمتن‌خطا
\errorstopmode	\پردازش‌توقف‌خطا
\escapechar	\نویسه‌ویژه
\euro	\یورو
\evensidemargin	\حاشیه‌زوج
\everycr	\هرسخ
\everydisplay	\هرنمایش
\everyhbox	\هرکادرا
\everyjob	\هرکار
\everymath	\هرریاضی
\everypar	\هربند
\everyvbox	\هرکادرو
\ExecuteOptions	\اجرای‌گزینه‌ها
\exhyphenpenalty	\جریمه‌اضافی‌تیره‌بندی
\expandafter	\بگستری‌پس‌از
\extracolsep	\فاصله‌اضافی‌بین‌ستونها
\@firstofone	\اولی‌ازیک
\@firstoftwo	\اولی‌ازدو
\f@ur	\چ@ار
\fam	\خانواده
\fancypage	\صفحه‌تجملی
\fbox	\کادر‌با
\fboxrule	\ضخامت‌کادر‌با
\fboxsep	\حاشیه‌کادر‌با

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\fcolorbox	\کادربارنگ
\fi	\رگ
\figurename	\عنوان شکل
\filbreak	\پرشکن
\fill	\پر
\firstmark	\علامت اول
\flat	\پهن
\floatpagefraction	\نسبت صفحه‌شناور
\floatingpenalty	\جریمه‌شناور
\floatsep	\فاصله بین شناور
\flushbottom	\تنظیم از پایین
\fmtname	\شکل‌بندی
\fmtversion	\ردیه‌شکل‌بندی
\fnssymbol	\نشانه
\font	\قلم
\fontdimen	\بعد قلم
\fontencoding	\رمزینه‌قلم
\fontfamily	\فamilی‌قلم
\fontname	\نام‌قلم
\fontseries	\شمايل‌قلم
\fontshape	\شكل‌قلم
\fontsize	\اندازه‌قلم
\footheight	\بلندای پایین صفحه
\footins	\درج زیرنویس
\footnote	\زیرنویس
\footnotemark	\علامت زیرنویس
\footnoterule	\خط زیرنویس
\footnotesep	\فاصله تازی زیرنویس
\footnotesize	\اندازه زیرنویس
\footnotetext	\متن زیرنویس
\footskip	\فاصله تا پایین صفحه
\frame	\فریم
\framebox	\کادر با خطر
\frenchspacing	\فواصل یکنواخت لاتین
\frontmatter	\مطلوب پیش
\futurelet	\بعد بگذار
\@gobble	@\خور حریصانه
\@gobbletwo	@\خور حریصانه دو
\@gobblefour	@\خور حریصانه چهار
\@gtempa	@\عاقتا

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\@gtempb	\عاقتب
\gdef	\ترع
\GenericInfo	\الگوی اطلاع
\GenericWarning	\الگوی هشدار
\GenericError	\الگوی خطا
\global	\عام
\globaldefs	\تعریف عام
\glossary	\الفت نامه
\glossaryentry	\فقره فرهنگ
\goodbreak	\خوش شکن
\graphpaper	\کاغذ گراف
\guillemotleft	\گیومه چپ
\guillemotright	\گیومه راست
\guilsinglleft	\گیومه تکی چپ
\guilsinglright	\گیومه تکی راست
\halign	\ردیف
\hang	\برو تو
\hangafter	\بعد از سطر
\hangindent	\تورفتگی ثابت
\hbadness	\بد نمایی
\hbox	\کادر
\headheight	\بلندای سر صفحه
\headsep	\فاصله از سر صفحه
\headtoname	\سر به نام
\heartsuit	\دل
\height	\بلند
\hfil	\پرا
\hfill	\پر پرا
\hfilneg	\رفع پرا
\hfuzz	\پر زافقی
\hideskip	\فاصله مخفی
\hidewidth	\عرض پنهان
\hline	\خط پر
\hoffset	\حاشیه
\holdinginserts	\حفظ درج
\hrboxsep	\فاصله اگرد
\hrule	\خط
\rulefill	\پر خط
\hsize	\طول سطر
\hskip	\فاصله

Continued on next page

Command in TeX or L^AT_EX Equivalent Persian Command

\hspace	\فضایا
\hss	\هردوا
\ht	\ارتفاع
\huge	\بزرگ
\Huge	\بزرگتر
\hyperlink	\ابرپیوند
\hypersetup	\بارگذاریابر
\hypertarget	\هدفابر
\hyphenation	\تیرهبندی
\hyphenchar	\نویسهتیره
\hyphenpenalty	\جریمهتیرهبندی
\@ifclassloaded	\@گرکلاسفراخوانیشده
\@ifdefinable	\@گرترشدنی
\@ifnextchar	\@گرنویسهبعدی
\@ifpackageloaded	\@گرسبکفراخوانیشده
\@ifstar	\@گرستاره
\@ifundefined	\@گرتعريفنشده
\if	\اگر
\if@tempswa	\اگر@سواقتآ
\ifcase	\گرانواع
\ifcat	\اگررده
\ifdefined	\اگرتعريفشده
\ifdim	\اگربعد
\ifeof	\اگرتهپرونده
\iff	\اگر
\iffalse	\اگرنادرست
\IfFileExists	\اگرپرونده موجود
\ifhbox	\اگرکادرا
\ifhmode	\اگرحالتا
\ifinner	\اگردرونی
\ifmmode	\اگرحالتریاضی
\ifnum	\اگرعدد
\ifodd	\اگرفرد
\ifthenelse	\اگرآنگاهديگر
\iftrue	\اگردرست
\ifvbox	\اگرکادرو
\ifvmode	\اگرحالتو
\ifvoid	\اگرتنه
\ifx	\اگرتم
\ignorespaces	\فاصلهخالیراندیدهبغیر

Continued on next page

Command in TeX or L^AT_EX Equivalent Persian Command

\immediate	\فوری
\include	\شامل
\includegraphics	\درج تصویر
\includeonly	\مشمولین
\indent	\تورفتگی
\index	\درنایه
\indexentry	\استعلام
\indexname	\عنوان نمایه
\indexspace	\فاصله رهنما
\input	\ورودی
\InputIfFileExists	\ورد پرونده گر موجود
\inputlineno	\شماره سطر ورودی
\insert	\درج
\insert penalties	\جریمه درج
\interfootnotelinepenalty	\جریمه بین سطرهای زیرنویس
\interdisplaylinepenalty	\جریمه بین سطرهای نمایش
\interlinepenalty	\جریمه بین سطرها
\intertext	\متن داخلی
\intertextsep	\فاصله شناور در متن
\invisible	\مخفي
\itdefault	\پيش فرض اي
\itshape	\شكلي ايتاليك
\item	\فقره
\itemindent	\تورفتگي فقره
\itemsep	\فاصله فقره
\iterate	\تكرار کن
\itshape	\شكلي اي
\jobname	\نام کار
\jot	\قلپ
\kern	\دورى
\kill	\الگو
\label	\برچسب
\labelenumi	\برچسب شمارش يك
\labelenumii	\برچسب شمارش دو
\labelenumiii	\برچسب شمارش سه
\labelenumiv	\برچسب شمارش چهار
\labelitemi	\برچسب فقره يك
\labelitemii	\برچسب فقره دو
\labelitemiii	\برچسب فقره سه
\labelitemiv	\برچسب فقره چهار

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\labelsep	\فاصله‌ازبرچسب
\labelwidth	\پهنانی‌برچسب
\language	\زبان
\large	\درشت
\Large	\ادرشت‌تر
\LARGE	\ادرشت‌درشت
\lastbox	\آخرین‌کادر
\lastkern	\آخرین‌دوری
\lastpenalty	\آخرین‌جریمه
\lastskip	\آخرین‌فاصله
\LaTeX	\لاتک
\LaTeXe	\لاتک‌ای
\lccode	\کدکوچک
\ldots	\نقاطخ
\leaders	\انشانگر
\leavevmode	\ترک‌و
\left	\چپ
\leftmargin	\حاشیه‌چپ
\leftmargini	\حاشیه‌چپ‌یک
\leftmarginii	\حاشیه‌چپ‌دو
\leftmarginiii	\حاشیه‌چپ‌سه
\leftmarginiv	\حاشیه‌چپ‌چهار
\leftmarginv	\حاشیه‌چپ‌پنج
\leftmarginvi	\حاشیه‌چپ‌شش
\leftmark	\علامت‌چپ
\leftpageskip	\کادرت‌چپ
\leftskip	\فاصله‌ابتدا‌ی‌سطر
\let	\بگذار
\line	\سطر
\linebreak	\سطرشکن
\linepenalty	\جریمه‌سطر
\lineskip	\فاصله‌سطرها
\lineskiplimit	\حدفاصله‌سطر
\linespread	\کشش‌فاصله‌سطر
\linethickness	\ضخامت‌خط
\linewidth	\پهنانی‌سطر
\listfigurename	\عنوان‌فهرست‌اشکال
\listfiles	\لیست‌پرونده‌ها
\listoffigures	\فهرست‌اشکال
\listoftables	\فهرست‌جداول

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\listparindent	\تورفتگی بندلیست
\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	\@زار
\@Mi	\@زاریک
\@Mii	\@زاردو
\@Miii	\@زارسه
\@Miv	\@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
\marginparpush	\فاصله دو حاشیه
\marginparsep	\فاصله تا حاشیه
\marginparwidth	\پهنای حاشیه
\mark	\علامت
\markboth	\علامت در دو طرف
\markright	\علامت در راست
\mathaccent	\اعراب ریاضی

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\mathchar	\نویسه‌ریاضی
\mathchardef	\تعریف‌نویسه‌ریاضی
\mathcode	\اکد‌ریاضی
\mathrm	\ریاضی‌رومن
\maxdeadcycles	\حداکثر تکرار
\maxdepth	\حداکثر عمق صفحه
\maxdimen	\بعدیشین
\mbox	\کادری
\mdseries	\شمایل‌نازک
\meaning	\معنا
\mediumseries	\نازک
\medmuskip	\فاصله متوسط‌ریاضی
\medskip	\پرش‌متوسط
\medskipamount	\مقدار پرش‌متوسط
\medspace	\فضای متوسط
\message	\پیام
\MessageBreak	\پیام‌شکن
\minrowclearance	\حداقل فاصله ردیف
\mkern	\دوری‌ریاضی
\month	\ماه
\moveleft	\انتقال‌بچپ
\moveright	\انتقال‌براست
\mskip	\فاصله‌ریاضی
\m@th	\ری‌@‌ضی
\multicolumn	\چندستونی
\multiply	\ضرب
\multispan	\چندادغام
\muskip	\میوفاصله
\muskipdef	\تعریف‌میوفاصله
\@namedef	\@‌ترنام
\@nameuse	\@‌کاربردنام
\@ne	@‌یک
\name	\نام
\natural	\طبیعی
\nearrow	\باریک
\nearrower	\باریکتر
\NeedsTeXFormat	\شکل‌بندی‌موردنیاز
\neg	\منفی
\negmedspace	\فضای متوسط‌منفی
\negthickspace	\فضای ضخیم‌منفی

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\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	\اكمک جدید
\newif	\اگر جدید
\newinsert	\درج جدید
\newlabel	\برچسب جدید
\newlength	\تعريف بعد جدید
\newline	\سطر جدید
\newlinechar	\نویسه سطر جدید
\newmuskip	\ميوفاصله جدید
\newpage	\صفحه جدید
\newread	\بخوان جدید
\newsavebox	\تعريف کادر جدید
\newskip	\فاصله جدید
\newtheorem	\قضيه جدید
\newtoks	\جزء جدید
\newwrite	\بنويس جدید
\noalign	\بىردېف
\nobreak	\نشکن
\nobreakspace	\فاصله نشکستنی
\nocite	\بدون سند
\noexpand	\انگستر
\nofiles	\بدون پرونده
\noindent	\بدون تورفتگی
\nointerlineskip	\بى فاصله سطر
\nolimits	\بدون حد
\nolinebreak	\سطر نشکن
\nonstopmode	\پردازش بدون توقف
\nonfrenchspacing	\فوacial متعارف لاتین
\nonumber	\بدون شماره
\nopagebreak	\صفحه نشکن
\normalbaselines	\کرسیهای متعارف

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\normalbaselineskip	\فاصله کرسی متعارف
\normalcolor	\رنگ عادی
\normalfont	\قلم عادی
\normallineskip	\فاصله سطر متعارف
\normallineskiplimit	\حد فاصله سطر متعارف
\normalmarginpar	\در حاشیه عادی
\normalsize	\اندازه عادی
\notag	\ بدون اتیکت
\null	\نول
\nullfont	\قلم تهی
\number	\ عدد
\numberline	\ سطر عددی
\numberwithin	\ شماره مطابق
\@evenfoot	\ پایین صفحه زوج
\@evenhead	\ بالای صفحه زوج
\@oddfoot	\ پایین صفحه فرد
\@oddhead	\ بالای صفحه فرد
\@outeqntrue	\ شماره بیرون درست
\@outeqnfal	\ شماره بیرون نادرست
\obeylines	\ سطر به سطر
\obeyspaces	\ فضاعل
\oddsidemargin	\ حاشیه فرد
\offinterlineskip	\ سطور بی فاصله
\omit	\ حذف
\@onlypreamble	\@ تهادر پیش درآمد
\onecolumn	\ یک ستون
\onlynotes	\ تهای اداداشت ها
\onlyslides	\ تهای اسلاید ها
\openin	\ باز کن ورودی
\openout	\ باز کن خروجی
\OptionNotUsed	\ گزینه مصرف نشده
\or	\ یا
\outer	\ بروندی
\output	\ صفحه بندی
\outputpenalty	\ جرمیه صفحه بندی
\overfullrule	\ علامت سرریز
\@preamblecmds	\@ فرمان های پیش درآمد
\p@	\ پو
\PackageError	\ خطای سبک
\PackageInfo	\ اطلاع سبک

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\PackageWarning	\هشدارسیک
\PackageWarningNoLine	\هشدارسیک بی سطر
\pagebreak	\صفحه شکن
\pagecolor	\رنگ صفحه
\pagedepth	\عمق صفحه
\pagefillstretch	\کشش پر ر صفحه
\pagefillstretch	\کشش پر ر صفحه
\pagefilstretch	\کشش پر صفحه
\pagegoal	\غايت صفحه
\pagename	\نام صفحه
\pagenumbering	\شماره گذاري صفحه
\pageref	\رجوع صفحه
\pagerulewidth	\ضخامت خط صفحه
\pageshrink	\فشردگي صفحه
\pagestretch	\کشش صفحه
\pagestyle	\سیک صفحه
\pagetotal	\جمع صفحه
\paperheight	\بلند اي کاغذ
\paperwidth	\پهناي کاغذ
\par	\بند
\paragraph	\پاراگراف
\parallel	\موازي
\parbox	\کادر پار
\parfillskip	\فاصله ته بند
\parindent	\تورفتگي سربند
\parsep	\فاصله بند لیست
\parshape	\شكل بند
\parskip	\فاصله بند
\part	\بخش
\partname	\عنوان بخش
\partopsep	\فاصله بالاي 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

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\predisplaydirection	\جهت‌پیش‌نمایش
\predisplaypenalty	\حریمه‌پیش‌نمایش
\predisplaysize	\اندازه‌پیش‌نمایش
\pretolerance	\پیش‌حد‌بدنایی
\prevdepth	\عمق‌قبلی
\prevgraf	\بند‌قبلی
\printindex	\نمایه‌دراینجا
\ProcessOptions	\پردازش‌گزینه‌ها
\protect	\تامین
\providecommand	\تهیه‌فرمان
\ProvidesClass	\آماده‌سازی‌طبقه
\ProvidesFile	\آماده‌سازی‌پرونده
\ProvidesPackage	\آماده‌سازی‌سبک
\pushtabs	\ثبت‌الگو
\quad	\کواد
\quad	\کوکواد
\@outputpagerestore	\باز‌آبی‌خروج‌صفحه
\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

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\rfloor	\کفر
\right	\راست
\rightmargin	\حاشیه‌راست
\rightmark	\علامت‌راست
\rightskip	\کادرتاراست
\rightskip	\فاصله‌انتها‌ی سطر
\rmdefault	\روم‌عادی
\rmfamily	\فamilی‌روم‌من
\Roman	\روم‌بزرگ
\roman	\روم‌کوچک
\romannumeral	\اعداد‌رومی
\rotatebox	\کادرچرخان
\rowcolor	\رنگ‌ردیف
\rule	\خط
\@secondoftwo	\@دویی‌ازدو
\@spaces	\فضاهای
\samepage	\همین‌صفحه
\savebox	\مقدار‌کادر
\sbox	\مقکادر
\scalebox	\کادراندازه
\scdefault	\بیش‌فرض‌تمام‌بزرگ
\scshape	\شکل‌تمام‌بزرگ
\scriptfont	\قلم‌توان
\scriptscriptfont	\قلم‌توان‌توان
\scriptsize	\سبک‌ته‌نوشت‌ته‌نوشت
\scriptstyle	\اندازه‌پانویس
\scrollmode	\سبک‌ته‌نوشت
\section	\برداش‌گذری
\secdef	\قسمت
\see	\تعريف‌قسمت
\seealso	\بینید
\seename	\نیز‌بینید
\selectfont	\نام‌بینید
\setboolean	\قلم‌بردار
\setbox	\تنظیم‌بولي
\setcounter	\درکادر
\setkeys	\مقدار‌شمارنده
\setlength	\مقدار‌کلید‌ها
\setminus	\مقدار‌بعد
	\تنظيم‌منها

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\SetSymbolFont	\تعريف قلم علام
\settodepth	\تنظيم به عمق
\settoheight	\تنظيم به ارتفاع
\settowidth	\مقدار بعدیه اندازه
\sfcode	\کد ضریب فاصله
\sfdefault	\پیش فرض سف
\sffamily	\فamil سن سریف
\shadowbox	\کادر سایه دار
\sharp	\تیر
\shipout	\بفرست
\shortstack	\پشتہ کوتاه
\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@	\فاصل @
\skipdef	\تعريف فاصله
\sl	\خوابیده
\sldefault	\پیش فرض خو
\slshape	\اشکل خوابیده
\sloppy	\راحت چین
\slshape	\شمایل خو
\small	\کوچک
\smallskip	\پرش کوتاه
\smallskipamount	\مقدار پرش کوتاه
\smash	\کوب
\smile	\بخند
\snglfntlocatecode	\کدمکان همانطور
\space	\فضا
\spacefactor	\ضریب فاصله
\spaceskip	\فاصله کلمات
\spadesuit	\پیک
\span	\ادغام
\special	\ویژه

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\splitmaxdepth	\حداکثرعمقستون
\splittopskip	\فاصلهبالایستون
\star	\ستاره
\stepcounter	\گامشمارنده
\stretch	\کشی
\string	\رشته
\strut	\شمع
\strutbox	\کادرشمع
\subitem	\زیربند
\ subparagraph	\زیرپاراگراف
\ subsection	\زیرفسمت
\ substack	\زیرپشتہ
\ subsubitem	\زیرزیربند
\ subsubsection	\زیرزیرقسمت
\ subset	\زیرمجموعه
\ subseteq	\زیرمجموعهمس
\ supereject	\منتهايصفحه
\ suppressfloats	\حذفمكانشناور
\@tempa	\موقتآ
\@tempb	\موقتب
\@tempc	\موقتب
\@tempd	\موقتب
\@tempe	\موقتب
\@tempboxa	\کادرقتآ
\@tempcnta	\شماقتآ
\@tempcntb	\شماقتب
\@tempdima	\بعدقتآ
\@tempdimb	\بعدقتب
\@tempdimc	\بعدقتپ
\@tempskipa	\فاقتآ
\@tempskipb	\فاقتب
\@tempswafalse	\سوقاتآنادرست
\@tempswatrue	\سوقاتآدرست
\@temptokena	\جزقتآ
\@thefnmark	\انگزيرنويس
\@thirdofthree	\سومي ازسه
\tabbingsep	\فاصله جاگذاري
\tabcolsep	\فاصله بينستونها
\tableofcontents	\فهرست مطالع
\tablename	\عنوان جدول

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\tabskip	\فاصله‌ستونها
\tabularnewline	\تہ‌سطر‌جدول
\tag	\اتیکت
\telephone	\تلفن
\TeX	\تک
\text	\متن
\textbullet	\گلوله‌متنی
\textfont	\قلم‌متن
\textemdash	\امدش‌متنی
\textendash	\اندش‌متنی
\textexclamdown	\تعجب‌وارونه‌متنی
\textperiodcentered	\ نقطه‌وسط‌متنی
\textquestiondown	\سوال‌وارونه‌متنی
\textquotedblleft	\نقل‌چپ‌متنی‌دولا
\textquotedblright	\نقل‌راست‌متنی‌دولا
\textquotelleft	\نقل‌متنی‌چپ
\textquoteright	\نقل‌متنی‌راست
\textvisiblespace	\فضای‌نمایان‌متنی
\textbackslash	\شکافت‌پشت‌متنی
\textbar	\میله‌متنی
\textgreater	\بزرگ‌تر‌متنی
\textless	\کمتر‌متنی
\textbf	\متن‌سیاه
\textcircled	\مدور‌متنی
\textcolor	\رنگ‌متن
\textcompwordmark	\نشان‌کلمه‌مرکب‌متن
\textfloatsep	\فاصله‌متن‌و‌شناور
\textfraction	\نسبت‌متن
\textheight	\بلند‌ای‌متن
\textindent	\متن‌تورفته
\textit	\متن‌ایتالیک
\textmd	\متن‌نازک
\textnormal	\متن‌نرمال
\textregistered	\ثبتی‌متنی
\textrm	\متن‌رومی
\textsc	\متن‌ تمام‌بزرگ
\textsf	\متن‌سن‌سریف
\textsl	\متن‌خوابیده
\textstyle	\سیک‌متنی
\textsuperscript	\بالانویس‌متنی

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\texttrademark	\اعلامت تجاری متنی
\texttt	\متن تایپ
\textup	\متن ایستاده
\textwidth	\پنهانی متن
\thanks	\زیرنویس عنوان
\the	\محتوای
\thempfn	\این زیرنویس
\thicklines	\خط‌های ضخیم
\thickmuskip	\فاصله زیاد ریاضی
\thinmuskip	\فاصله کم ریاضی
\thickspace	\فضاء ضخیم
\thinlines	\خط‌های نازک
\thinspace	\دوری کوچک
\thisfancypage	\این صفحه تجملی
\thispagestyle	\سبک این صفحه
\thr@@	@ سه \
\tilde	\مد
\tiny	\ظریف
\time	\زمان
\times	\ضرب در
\title	\عنوان
\to	\به
\today	\امروز
\toks	\جزء
\toksdef	\تعریف جزء
\tolerance	\حد بندنامایی
\top	\بالا
\topfigrule	\خط‌بالای 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 فرمان‌ین
\tracinglostchars	\ردگیری حروف
\tracingmacros	\ردگیری ماکروها
\tracingonline	\ردگیری نمایشی

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\tracingoutput	\ردگیری صفحه‌بندی
\tracingpages	\ردگیری صفحات
\tracingparagraphs	\ردگیری بندها
\tracingrestores	\ردگیری بازگردانی
\tracingstats	\ردگیری آمارها
\triangle	\مثلث
\ttdefault	\پیش‌فرض‌تایپ
\ttfamily	\فamil تایپ
\tw@	\@دو
\twocolumn	\دوستون
\typein	\درنویس
\typeout	\برنویس
\uccode	\کدبزرگ
\uchyph	\تیره‌بندی‌بزرگ
\undefined	\تعريف‌نشده
\underline	\زیرخط
\unhbox	\بی‌کاردا
\unhcopy	\بی‌کپیا
\unitlength	\ واحد طول
\unkern	\برگشت‌دوری
\unpenalty	\برگشت‌جریمه
\unskip	\برگشت‌فاصله
\unvbox	\بی‌کاررو
\unvcopy	\بی‌کپیو
\updefault	\پیش‌فرض‌ایستاده
\upshape	\شکل‌ایستاده
\usebox	\ازکاردر
\usecounter	\باسمارشگر
\usefont	\گزینش‌قلم
\usepackage	\اسیک‌لازم
\@vobeyspaces	\فضاهای‌فعال
\@void	\@تهی
\vadjust	\تنظیم‌و
\valign	\ردیف‌و
\value	\محتوای‌شمارنده
\vbadness	\بدنمایی‌و
\vbox	\کاردا
\vcenter	\کادر و سط
\verb	\همانطور
\vfil	\پرو\

Continued on next page

Command in TeX or L ^A T _E X	Equivalent Persian Command
\vfill	\پررو
\vfilneg	\رفع پررو
\vfuzz	\پرزعتمودی
\visible	\نمایان
\vline	\خط عمود
\voffset	\حاشیه و
\voidb@x	\ک@درتهی
\vpageref	\ارجاع صفحه ع
\vboxsep	\فاصله و گرد
\vref	\ارجاع
\vrule	\خط و
\vsize	\طول صفحه
\vskip	\فاصله و
\vspace	\فضای و
\vsplit	\شکست و
\vss	\هردو و
\vtop	\کادر گرد
\wd	\عرض
\whiledo	\اماد ام 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 گستر شی
\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

Continued on next page

Command in XePersian	Equivalent Persian Command
\hboxL	\کادرآچپ
\hboxR	\کادرراست
\keyval@eq@alias@key	\معادل@کلید
\Latincite	\مرجع لاتین
\latinfont	\قلم لاتین
\latintoday	\امروز لاتین
\leftfootnoterule	\خطزیرنویس چپ
\lr	\متن لاتین
\LRE	\چپ براست
\LTRdblcol	\دوسنونی چپ
\LTRfootnote	\پانویس
\LTRfootnotetext	\متن پانویس
\LTRthanks	\پانویس عنوان
\persianfont	\قلم پارسی
\PersianMathsDigits	\اعداد فرمولهای پارسی
\plq	\علامت چپ نقل قول پارسی
\prq	\علامت راست نقل قول پارسی
\rightfootnoterule	\خطزیرنویس راست
\rl	\متن پارسی
\RLE	\راست بچپ
\RTLdblcol	\دوسنونی راست
\RTLfootnote	\پانوشت
\RTLfootnotetext	\متن پانوشت
\RTLthanks	\پانوشت عنوان
\@SepMark	\علامت بین
\SepMark	\علامت بین
\setdefaultbibitems	\یگذار مرجوعات عادی
\setdefaultmarginpar	\یگذار در حاشیه عادی
\setdigitfont	\گزینش قلم اعداد فرمولها
\setfootnoteLR	\یگذار زیرنویس چپ
\setfootnoteRL	\یگذار زیرنویس راست
\setlatintextfont	\گزینش قلم لاتین متن
\setLTR	\یگذار متن چپ
\setLTRbibitems	\یگذار مرجوعات چپ
\setLTRmarginpar	\یگذار در حاشیه چپ
\setRTL	\یگذار متن راست
\setRTLbibitems	\یگذار مرجوعات راست
\setRTLmarginpar	\یگذار در حاشیه راست
\settextfont	\گزینش قلم متن
\textwidthfootnoterule	\خطزیرنویس پنهانی متن

Continued on next page

Command in XePersian	Equivalent Persian Command
\twocolumnstableofcontents	\فهرستمطالبدوستونی
\unsetfootnoteRL	\انگذارزیرنویسراست
\unsetLTR	\انگذارمتنچپ
\unsetRTL	\انگذارمتنراست
\vboxL	\کادروازچپ
\vboxR	\کادروازراست
\XeLaTeX	\ازیلاتک
\XePersian	\ازیپرشین
\xepersianversion	\گونهزیپرشین
\xepersiandate	\تاریخگونهزیپرشین
\XeTeX	\ازیتک

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	محتوایپرونده
filecontents*	محتوایپرونده*
flushleft	چپچین
flushright	راستچین
itemize	فقرات
letter	نامه
list	لیست
longtable	جدولدراز
lrbox	کادردرج
math	ریاضی
matrix	ماتریس
minipage	صفحهکوچک
multicols	چندستونیها
multiline	چندخطی
note	یادداشت

Continued on next page

Environment in L ^A T _E X	Equivalent Persian Environment
overlay	انباشتن
picture	تصویر
quotation	اقتباس
quote	نقل
slide	اسلاید
sloppypar	پارنامرتب
split	شکافتن
subarray	زیرآرایه
tabbing	جاگذاری
table	لوح
table*	لوح*
tabular	جدول
tabular*	جدول*
thebibliography	مراجع
theindex	محتوای 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

Continued on next page

Position argument in L^AT_EX Equivalent Persian position argument

J	ت
l	ج
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).

2.6.4 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>	پهنا‌ی طبیعی
<code>natheight</code>	بلندای‌طبیعی
<code>bb</code>	مختصات
<code>viewport</code>	محدوده‌نمایش
<code>trim</code>	حذف‌اطراف
<code>angle</code>	زاویه
<code>width</code>	پهنا
<code>height</code>	بلند
<code>totalheight</code>	بلندای‌کل
<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

Continued on next page

Original Key units	Equivalent Persian Key
	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

2.6.5 Localizations of font features and font feature options

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

Table 8: Persian Equivalent font features

Original font feature	Equivalent Persian font feature
ExternalLocation	مکان خارجی
ExternalLocation	مسیر
Renderer	تحویل دهنده
BoldFont	قلم سیاه
Language	زبان
Script	خط
UprightFont	قلم عمودی
ItalicFont	قلم ایتالیک
BoldItalicFont	قلم ایتالیک سیاه
SlantedFont	قلم خوابیده
BoldSlantedFont	قلم خوابیده سیاه
SmallCapsFont	قلم کلاه کوچک
UprightFeatures	ویژگی های قلم عمودی
BoldFeatures	ویژگی های قلم سیاه
ItalicFeatures	ویژگی های قلم ایتالیک
BoldItalicFeatures	ویژگی های قلم ایتالیک سیاه
SlantedFeatures	ویژگی های قلم خوابیده
BoldSlantedFeatures	ویژگی های قلم خوابیده سیاه
SmallCapsFeatures	ویژگی های قلم کلاه کوچک
SizeFeatures	ویژگی های اندازه
Scale	ضریب
WordSpace	فضای کلمه

Continued on next page

Original font feature	Equivalent Persian font feature
PunctuationSpace	فضای نقطه‌گذاری
FontAdjustment	تنظیم‌قلم
LetterSpace	فضای حرف
HyphenChar	نویسه‌تیره
Color	رنگ
Opacity	کدری
Mapping	نگاشت
Weight	سنگینی
Width	پهنا
OpticalSize	اندازه‌چشمی
FakeSlant	خوابیده‌تقلی
FakeStretch	کشش‌تقلی
FakeBold	سیاه‌تقلی
AutoFakeSlant	خوابیده‌تقلی خودکار
AutoFakeBold	سیاه‌تقلی خودکار
Ligatures	دویاچند‌حرف‌متصل‌به‌هم
Alternate	متناوب
Variant	گوناگون
Variant	مجموعه‌سبکی
CharacterVariant	گوناگونی‌نویسه
ScriptStyle	سبک‌اسکریپت
ScriptScriptStyle	سبک‌اسکریپت‌اسکریپت
Style	سبک
Annotation	پادداشت
RawFeature	ویرگی‌های کال
CharacterWidth	پهنا نویسه
Numbers	ارقام
Contextuals	متنی
Diacritics	تفکیک‌کنندگان
Letters	حروف
Kerning	دوری
VerticalPosition	موقعیت عمودی
Fractions	کسر

Table 9: Persian Equivalent font feature options

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

2.7 A Sample Input T_EX 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}

```

2.8 Font Commands

2.8.1 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`³ 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.

³You do not need to install `Persian Modern` fonts since they are already included in your `TeX` distribution.

- ☞ `\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).

2.8.2 Defining Extra Persian and Latin Fonts

```
\defpersianfont\CS [Options] {\langle font name\rangle}
\deflatinfont\CS [Options] {\langle font name\rangle}
```

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

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

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

2.8.3 Choosing Persian Sans Font

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

2.8.4 Choosing Persian Mono Font

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

2.8.5 Choosing Persian Iranic Font

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

2.8.6 Choosing Persian Navar Font

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

2.8.7 Choosing Persian Pook Font

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

2.8.8 Choosing Persian Sayeh Font

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

2.8.9 Choosing Latin Sans Font

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

2.8.10 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

```
\today \latintoday \twocolumnstableofcontents \XePersian  
\plq \prq
```

☞ `\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:

```
\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 `harfi` counters, are integers between 0 and 999,999,999.

- ☞ For **harfi** counter, if you give an integer bigger than 32 or a negative integer (if you give integer 0, it returns nothing), then you get error and for **adadi** and **tartibi** counters, if you give an integer bigger than 999,999,999, then you get an error message.
- ☞ For **adadi** and **tartibi** counters, if you give an integer less than 0 (a negative integer), then **adadi** and **tartibi** counters return **adadi** and **tartibi** form of the integer 0, respectively.
- ☞ `\harfinumeral` returns the **harfi** form of $\langle\text{integer}\rangle$, where $1 \leq \text{integer} \leq 32$ and `\adadinumeral`, and `\tartibinumeral` return **adadi**, and **tartibi** form of $\langle\text{integer}\rangle$ 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 **T_EX** 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 **T_EX**'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 **T_EX**'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-0.11.py`. To convert your FarsiTeX files to XePersian, put

`ftxe-0.11.py` in the same directory that your FarsiTeX file is, and then open a terminal/command prompt and do the following:

```
python ftxe-0.11.py file.ftx file.tex
```

This will convert your `file.ftx` (FarsiTeX file) to `file.tex` (XePersian file).

The general syntax syntax of using the python script is as follow:

```
python ftxe-0.11.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 create⁴ a magazine just load the class as usual⁵, with

⁴For a sample file, please look at `magazine-sample.tex` in the `doc` folder

⁵You 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.