The XePersian *Package*

User documentation for version 25.3

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

The announcements for the new releases of the package will also appear in the Discussions space under the Announcements category.

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The XePersian *Package*

Persian for LaTeX 2ε, using XeTeX engine

User documentation for version 25.3

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Contents

1 Introduction **3**
- 1.1 Important Notes 3
- 1.2 XePersian Info On The Terminal and In The Log File . . 3

2 Basics **4**
- 2.1 Loading The Package 4
- 2.2 XePersian's Symbol 5
- 2.3 Commands for Version number, and Date of The Package 5
- 2.4 Options of The Package . . . 5
  - 2.4.1 `defaultlatinfontfeatures` Option 5
  - 2.4.2 `extrafootnotefeatures` Option 5
  - 2.4.3 `Kashida` Option 5
  - 2.4.4 `quickindex` Option . . 6
  - 2.4.5 `quickindex-variant1` Option 6
  - 2.4.6 `quickindex-variant2` Option 6
  - 2.4.7 `localise` Option . . . 6
  - 2.4.8 Localizations of the keys and key values of graphicx package . . . 32
  - 2.4.9 Localizations of font features and font feature options 33
- 2.5 A Sample Input TeX File . . 35
- 2.6 Font Commands 35
  - 2.6.1 Basic Font Commands 35
  - 2.6.2 Defining Extra Persian and Latin Fonts . 36
  - 2.6.3 Choosing Persian Sans Font 36
  - 2.6.4 Choosing Persian Mono Font 36
  - 2.6.5 Choosing Persian Iranic Font 36
  - 2.6.6 Choosing Persian Navar Font 37
  - 2.6.7 Choosing Persian Pook Font 37
  - 2.6.8 Choosing Persian Sayeh Font 37
  - 2.6.9 Choosing Latin Sans Font 37
  - 2.6.10 Choosing Latin Mono Font 37

3 Latin and Persian Environment **37**
- 3.1 latinitems and parsiitems environments 37
- 3.2 Short Latin and Persian Texts 38
- 3.3 Miscellaneous Commands . . 38
- 3.4 New Commands 38
- 3.5 Additional Counters 39
- 3.6 Things To Know About `\setmathdigitfont`, `\setmathsfdigitfont`, and `\setmathttdigitfont` 39

4 New Conditionals **40**

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4.1 Shell escape (or write18) conditional 40

5 Bilingual Captions 40
5.1 Support For Various Packages 40
5.1.1 Things You Should Know about Support For enumerate Package 40
5.2 Index Generation 40
5.3 Converting Your FarsiTEX Files To XePersian or Unicode 40

6 Extra Packages And Classes 41
6.1 Magazine Typesetting 41
6.1.1 Introduction 41
6.1.2 Usage 41
6.1.3 Front Page 42
6.1.4 Inside 43
6.1.5 The article environment 43
6.1.6 The editorial environment 44
6.1.7 The shortarticle environment 45
6.1.8 Commands between articles 45
6.1.9 Customization 45
6.1.10 Front Page 45
6.1.11 Inside The Magazine . 46
6.1.12 Class Options 47
6.2 Typesetting Multiple-choice Questions 48
6.2.1 Introduction 48
6.2.2 Usage 48
6.2.3 Loading The Package . 48
6.2.4 Creating Questions . . 48
6.2.5 The `question` Environment 48
6.2.6 Question Numbers . . 49
6.2.7 The Form and the Mask 49
6.2.8 Typesetting corrections 49
6.2.9 Important Note 49
6.3 Customising The Package . . 50
6.3.1 The `question` environment 50
6.3.2 The Form and the Mask 50
6.3.3 The correction 50

1 Introduction

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

1.1 Important Notes

☞ The XePersian package only works with XeTeX engine.

☞ Before reading this documentation, you should have read the documentation of the bidi package. The XePersian package automatically loads bidi package with `RTLdocument` option enabled and hence any commands that bidi package offers, is also available in XePersian package. Here, in this documentation, we will not repeat any of bidi package's commands.

☞ In previous versions ($\leq$ 1.0.3) of XePersian, a thesis class 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 LaTeX and should not provide any class for typesetting thesis. So if you really want to have a class file for typesetting thesis, then you should ask your University/department to write one for you.

1.2 XePersian Info On The Terminal and In The Log File

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

```
**************************************************
*
* xepersian package (Persian for LaTeX, using XeTeX engine)
*
* Description: The package supports Persian
* typesetting, using fonts provided in the
* distribution.
*
* Copyright (c) 2008--2024 Vafa Khalighi
* Copyright (c) 2018--2020 bidi-tex GitHub Organization
*
* v25.3 (Release Mount Damavand), 2024/12/15
*
* 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**[1] (shown on the first page of this documentation) symbolizes XePersian.

2.3 Commands for Version number, and Date of The Package

`\xepersianversion` `\xepersiandate`

☞ `\xepersianversion` gives the current version of the package.

☞ `\xepersiandate` gives the current date of the package.

```
\documentclass{article}
\usepackage{xepersian}
\settextfont{XB Niloofar}
\begin{document}
\begin{latin}
This is typeset by \textsf{\XePersian} package,\xepersianversion,
\xepersiandate.
\end{latin}
\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.

[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

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

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

`\KashidaOn` `\KashidaOff`

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

☞ `\KashidaOff` disables Kashida.

2.4.4 `quickindex` Option

When you generally want to prepare index for your Persian documents, you need to first run `xelatex`, then `xindy`, and again `xelatex` on your document respectively, which is very time consuming. The `quickindex` option gives you the index with only and only one run of `xelatex`. To use this feature, you will need to run `xelatex --shell-escape` on your TEX document; otherwise you get an error which indicates that shell scape (or write18) is not enabled.
This option is now obsolete and equivalent to `quickindex-variant2` option.

2.4.5 `quickindex-variant1` Option

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

2.4.6 `quickindex-variant2` Option

Same as `quickindex` Option but uses variant two (in which ī 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{⟨command-name in Persian⟩}{⟨original LaTeX command-name⟩}
\eqenvironment{⟨environment-name in Persian⟩}{⟨original LaTeX environment-name⟩}
```

Table 1: The Equivalent LaTeX and TeX Commands

Command in TeX or LaTeX	Equivalent Persian Command
\@arstrut	\شمع جدول
\above	\فوق
\abovedisplayshortskip	\فاصله کوتاه‌بالای نمایش
\abovedisplayskip	\فاصله‌بالای نمایش
\abstractname	\عنوان چکیده
\accent	\اکسنت
\active	\فعال
\addcontentsline	\بیفزاسطرفهرست
\addpenalty	\اضافه‌برجریمه
\address	\نشانی
\addtocontents	\بیفزابه فهرست
\addtocounter	\اضافه‌برشمارنده
\addtolength	\اضافه‌بر بعد
\addvspace	\بیفزافضای و
\adjdemerits	\تنظیم‌بدنمایی
\advance	\بیفزابر
\afterassignment	\بعدازانتساب
\aftergroup	\بعدازگروه
\aleph	\الف
\aliasfontfeature	\خصیصه مستعارقلم
\aliasfontfeatureoption	\انتخاب خصیصه مستعارقلم
\allowbreak	\شکستنی
\alloc@	\تخصی@
\allocationnumber	\تخصیص‌یافته
\allowdisplaybreaks	\شکست نمایش مجاز
\Alph	\حروف‌بزرگ
\alph	\حروف کوچک
\alsoname	\نام همچنین

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\and	\و
\angle	\زاویه
\appendixname	\عنوان‌پیوست
\approx	\تقریب
\arabic	\عربی
\arg	\آرگ
\arrayrulecolor	\رنگ خط جدول
\arraycolsep	\فاصله ستونهای آرایه
\arrayrulewidth	\ضخامت خط جدول
\arraystretch	\کشیدگی آرایه
\AtBeginDocument	\درآغازنوشتار
\AtEndDocument	\درپایان نوشتار
\AtEndOfClass	\درانتهای طبقه
\AtEndOfPackage	\درانتهای سبک
\author	\نویسنده
\backmatter	\مطلب‌پشت
\backslash	\شکاف‌پشت
\badness	\بدنمایی
\bar	\میله
\baselineskip	\فاصله کرسی
\baselinestretch	\کشش فاصله کرسی
\batchmode	\پردازش دسته ای
\begin	\شروع
\beginL	\شروع چپ
\beginR	\شروع راست
\begingroup	\شروع گروه
\belowdisplayshortskip	\فاصله کوتاه‌پایین نمایش
\belowdisplayskip	\فاصله‌پایین 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	\پرش‌بلند
\bigskipamount	\مقدار پرش‌بلند
\botfigrule	\خط‌پایین شناور
\botmark	\علامت‌پایین
\bottompageskip	\کادرتاپایین
\bottomfraction	\نسبت‌پایین
\box	\کادر

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\boxmaxdepth	\حداکثرعمق کادر
\break	\بشکن
\bullet	\گلوله
\@cclv	\دوپن@پنج
\@cclvi	\دوپن@شش
\caption	\شرح
\catcode	\کدرده
\cc	\رونوشت
\ccname	\نام رونوشت
\cdot	\نقطه وسط
\cdots	\نقاط وسط
\centering	\تنظیم ازوسط
\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	\هشدارطبقه
\ClassWarningNoLine	\هشدارطبقه‌بی سطر
\cleaders	\نشانگرمرکزی
\cleardoublepage	\دوصفحه‌پاک
\clearpage	\صفحه‌پاک
\cline	\خط ناپر
\closein	\ببندورودی
\closeout	\ببندخروجی
\closing	\بستن
\clubpenalty	\جریمه سربند
\clubsuit	\خاج
\colbotmark	\علامت‌پایین ستون اول
\colfirstmark	\علامت اول ستون اول
\color	\رنگ
\colorbox	\کادررنگ
\coltopmark	\علامت‌بالای ستون اول
\columncolor	\رنگ ستون
\columnsep	\بین ستون
\columnwidth	\پهنای ستون
\columnseprule	\خط‌بین ستون
\contentsline	\سطرفهرست

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\contentsname	\عنوان فهرست مطالب
\copy	\کپی
\copyright	\حق تالیف
\count	\شمار
\count@	\شمار@
\countdef	\تعریف شمار
\cr	\سخ
\crcr	\سخ سخ
\csname	\نام فرمان
\CurrentOption	\گزینه جاری
\dashbox	\کادربینابین
\dashv	\بینابین ع
\@date	\@تاریخ
\date	\تاریخ
\day	\روز
\dblbotfigrule	\خط‌پایین شناور پهن
\dblbottomfraction	\نسبت‌پهن‌پایین
\dblfigrule	\خط‌بالای شناور پهن
\dblfloatpagefraction	\نسبت صفحه شناور پهن
\dblfloatsep	\فاصله‌بین شناور پهن
\dblfntlocatecode	\کدمکان غیرهمانطور
\dbltextfloatsep	\فاصله متن و شناور پهن
\dbltopfraction	\نسبت‌پهن‌بالا
\DeclareFixedFont	\اعلان قلم ثابت
\DeclareGraphicsExtensions	\اعلان‌پسوندگرافیک
\DeclareGraphicsRule	\اعلان دستورگرافیک
\DeclareOldFontCommand	\اعلان فرمان قلم قدیمی
\DeclareOption	\اعلان گزینه
\DeclareRobustCommand	\اعلان فرمان قوی
\DeclareSymbolFont	\اعلان قلم علائم
\deadcycles	\دوربسته
\def	\تر
\define@key	\تعریف@کلید
\definecolor	\تعریف رنگ
\deg	\درجه
\delcode	\کدجداساز
\delimiter	\جداساز
\delimiterfactor	\ضریب جداساز
\depth	\گودی
\diamondsuit	\خشت
\dim	\ابعاد
\dimen	\بعد
\dimen@	\بعد@

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\dimen@i	\بعد@یک
\dimen@ii	\بعد@دو
\dimendef	\تعریف‌بعد
\discretionary	\تیره‌گذاری
\displaybreak	\شکست‌نمایش
\displayindent	\تورفتگی‌نمایش
\displaystyle	\سبک‌نمایش
\displaywidth	\عرض‌نمایش
\divide	\تقسیم
\documentclass	\طبقه‌نوشتار
\do	\کن
\dospecials	\تعویض‌کدها
\dot	\نقطه
\doteq	\نقطه‌مساوی
\dotfill	\پرنقطه‌ا
\dots	\نقاط
\doublebox	\کادردولا
\doublerulesepcolor	\رنگ‌فاصله‌دوخط‌جدول
\doublerulesep	\فاصله‌بین‌دوخط
\downarrow	\فلش‌پایین
\dp	\عمق
\dump	\تخلیه
\edef	\ترگ
\egroup	\پاگروه
\eject	\انتهای‌فاصله
\else	\گرنه
\em	\تاکید
\emergencystretch	\کشش‌لاجرم
\emph	\موکد
\@empty	\@پوچ
\empty	\پوچ
\emptyset	\مجموعه‌پوچ
\end	\پایان
\endL	\پایان‌چپ
\endR	\پایان‌راست
\endcsname	\پایان‌نام‌فرمان
\endfirsthead	\پایان‌اولین‌سر
\endfoot	\پایان‌پا
\endgraf	\ته‌بند
\endgroup	\پایان‌گروه
\endhead	\پایان‌سر
\endinput	\پایان‌ورودی
\endlastfoot	\پایان‌آخرین‌پا

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\enlargethispage	\گسترش این صفحه
\endline	\ته سطر
\endlinechar	\نویسه ته سطر
\enspace	\ان دوری
\enskip	\ان فاصله
\eqcommand	\فرمان جانشین
\eqenvironment	\محیط جانشین
\eqref	\ارجاع فر
\errhelp	\کمک خطا
\errmessage	\پیام خطا
\errorcontextlines	\سطرمتن خطا
\errorstopmode	\پردازش توقف خطا
\escapechar	\نویسه ویژه
\euro	\یورو
\evensidemargin	\حاشیه زوج
\everycr	\هرسخ
\everydisplay	\هرنمایش
\everyhbox	\هرکادرا
\everyjob	\هرکار
\everymath	\هرریاضی
\everypar	\هربند
\everyvbox	\هرکادرو
\ExecuteOptions	\اجرای گزینه ها
\exhyphenpenalty	\جریمه اضافی تیره‌بندی
\expandafter	\بگسترپس از
\extracolsep	\فاصله اضافی‌بین ستونها
\@firstofone	\@اولی ازیک
\@firstoftwo	\@اولی ازدو
\f@ur	\چ@ار
\fam	\خانواده
\fancypage	\صفحه تجملی
\fbox	\کادربا
\fboxrule	\ضخامت کادربا
\fboxsep	\حاشیه کادربا
\fcolorbox	\کادربارنگ
\fi	\رگ
\figurename	\عنوان شکل
\filbreak	\پرشکن
\fill	\پر
\firstmark	\علامت اول
\flat	\پهن
\floatpagefraction	\نسبت صفحه شناور
\floatingpenalty	\جریمه شناور

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\floatsep	\فاصله‌بین شناور
\flushbottom	\تنظیم از پایین
\fmtname	\شکلبندی
\fmtversion	\رده شکلبندی
\fnsymbol	\نشانه
\font	\قلم
\fontdimen	\بعد قلم
\fontencoding	\رمزینه قلم
\fontfamily	\فامیل قلم
\fontname	\نام قلم
\fontseries	\شمایل قلم
\fontshape	\شکل قلم
\fontsize	\اندازه قلم
\footheight	\بلندای پایین صفحه
\footins	\درج زیرنویس
\footnote	\زیرنویس
\footnotemark	\علامت زیرنویس
\footnoterule	\خط زیرنویس
\footnotesep	\فاصله تا زیرنویس
\footnotesize	\اندازه زیرنویس
\footnotetext	\متن زیرنویس
\footskip	\فاصله تا پایین صفحه
\frame	\فریم
\framebox	\کادر باخط
\frenchspacing	\فواصل یکنواخت لاتین
\frontmatter	\مطلب پیش
\futurelet	\بعد بگذار
\@gobble	\@خورحریصانه
\@gobbletwo	\@خورحریصانه دو
\@gobblefour	\@خورحریصانه چهار
\@gtempa	\@عاقت آ
\@gtempb	\@عاقت‌ب
\gdef	\ترع
\GenericInfo	\الگوی اطلاع
\GenericWarning	\الگوی هشدار
\GenericError	\الگوی خطا
\global	\عام
\globaldefs	\تعاریف عام
\glossary	\لغت نامه
\glossaryentry	\فقره فرهنگ
\goodbreak	\خوش شکن
\graphpaper	\کاغذگراف
\guillemotleft	\گیومه چپ

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\guillemotright	\گیومه راست
\guilsinglleft	\گیومه تکی چپ
\guilsinglright	\گیومه تکی راست
\halign	\ردیف ا
\hang	\بروتو
\hangafter	\بعدازسطر
\hangindent	\تورفتگی ثابت
\hbadness	\بدنمایی ا
\hbox	\کادرا
\headheight	\بلندای سرصفحه
\headsep	\فاصله ازسرصفحه
\headtoname	\سربه نام
\heartsuit	\دل
\height	\بلندا
\hfil	\پرا
\hfill	\پررا
\hfilneg	\رفع پرا
\hfuzz	\پرزافقی
\hideskip	\فاصله مخفی
\hidewidth	\عرض پنهان
\hline	\خط‌پر
\hoffset	\حاشیه ا
\holdinginserts	\حفظ درج
\hrboxsep	\فاصله اگرد
\hrule	\خط ا
\hrulefill	\پرخط ا
\hsize	\طول سطر
\hskip	\فاصله ا
\hspace	\فضای ا
\hss	\هردوا
\ht	\ارتفاع
\huge	\بزرگ
\Huge	\بزرگ تر
\hyperlink	\ابرپیوند
\hypersetup	\بارگذاری ابر
\hypertarget	\هدف ابر
\hyphenation	\تیره‌بندی
\hyphenchar	\نویسه تیره
\hyphenpenalty	\جریمه تیره‌بندی
\@ifclassloaded	\@گرکلاس فراخوانی شده
\@ifdefinable	\@گرترشدنی
\@ifnextchar	\@گرنویسه‌بعدی
\@ifpackageloaded	\@گرسبک فراخوانی شده

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\@ifstar	\@گرستاره
\@ifundefined	\@گرتعریف نشده
\if	\گر
\if@tempswa	\گر@سواقت آ
\ifcase	\گرانواع
\ifcat	\گرده
\ifdefined	\گرتعریف شده
\ifdim	\گربعد
\ifeof	\گرته‌پرونده
\iff	\گرر
\iffalse	\گرنادرست
\IfFileExists	\گرپرونده موجود
\ifhbox	\گرکادرا
\ifhmode	\گرحالت ا
\ifinner	\گردرونی
\ifmmode	\گرحالت ریاضی
\ifnum	\گرعدد
\ifodd	\گرفرد
\ifthenelse	\گرآنگاه دیگر
\iftrue	\گردرست
\ifvbox	\گرکادرو
\ifvmode	\گرحالت و
\ifvoid	\گرتهی
\ifx	\گرتام
\ignorespaces	\فاصله خالی راندیده‌بگیر
\immediate	\فوری
\include	\شامل
\includegraphics	\درج تصویر
\includeonly	\مشمولین
\indent	\تورفتگی
\index	\درنمایه
\indexentry	\استعلام
\indexname	\عنوان نمایه
\indexspace	\فاصله رهنما
\input	\ورودی
\InputIfFileExists	\ورودپرونده گرموجود
\inputlineno	\شماره سطرورودی
\insert	\درج
\insertpenalties	\جریمه درج
\interfootnotelinepenalty	\جریمه‌بین سطرهای زیرنویس
\interdisplaylinepenalty	\جریمه‌بین سطرهای نمایش
\interlinepenalty	\جریمه‌بین سطرها
\intertext	\متن داخلی

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\intertextsep	\فاصله شناور درمتن
\invisible	\مخفی
\itdefault	\پیش فرض ای
\itshape	\شکل ایتالیک
\item	\فقره
\itemindent	\تورفتگی فقره
\itemsep	\فاصله فقره
\iterate	\تکرارکن
\itshape	\شکل ای
\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 ازبرچسب
\labelwidth	\پهنای‌برچسب
\language	\زبان
\large	\درشت
\Large	\درشت تر
\LARGE	\درشت 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 چپ‌یک
\leftmarginii	\حاشیه چپ دو
\leftmarginiii	\حاشیه چپ سه

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\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
\linepenalty	\جریمه سطر
\lineskip	\فاصله سطرها
\lineskiplimit	\حدفاصله سطر
\linespread	\کشش فاصله سطر
\linethickness	\ضخامت خط
\linewidth	\پهنای سطر
\listfigurename	\عنوان فهرست اشکال
\listfiles	\لیست‌پرونده ها
\listoffigures	\فهرست اشکال
\listoftables	\فهرست جداول
\listparindent	\تورفتگی‌بندلیست
\listtablename	\عنوان فهرست جداول
\LoadClass	\بارکن طبقه
\LoadClassWithOptions	\بارکن طبقه‌باگزینه
\location	\مکان
\long	\بلند
\loop	\حلقه
\looseness	\گسیختگی
\lower	\انتقال‌بپایین
\@makeother	\@دیگر
\@m	\@زار
\@M	\@ده‌زار
\@Mi	\@ده‌زاریک
\@Mii	\@ده‌زاردو
\@Miii	\@ده‌زارسه
\@Miv	\@ده‌زارچهار
\@MM	\@بیس‌زار
\m@ne	\@من‌ا
\mag	\بزرگ نمایی
\magstep	\گام
\magstephalf	\نیم گام
\mainmatter	\مطلب اصلی
\makeatletter	\ات حرف
\makeatother	\ات دیگر

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\makebox	\کادربی خط
\makeglossary	\ساخت فرهنگ
\makeindex	\تهیه نمایه
\makelabel	\ساخت‌برچسب
\makelabels	\ساخت‌برچسب ها
\MakeLowercase	\ساخت حروف کوچک
\maketitle	\عنوان ساز
\MakeUppercase	\ساخت حروف‌بزرگ
\marginpar	\درحاشیه
\marginparpush	\فاصله دوحاشیه
\marginparsep	\فاصله تاحاشیه
\marginparwidth	\پهنای حاشیه
\mark	\علامت
\markboth	\علامت دردوطرف
\markright	\علامت درراست
\mathaccent	\اعراب ریاضی
\mathchar	\نویسه ریاضی
\mathchardef	\تعریف نویسه ریاضی
\mathcode	\کدریاضی
\mathrm	\ریاضی رومن
\maxdeadcycles	\حداکثرتکرار
\maxdepth	\حداکثرعمق صفحه
\maxdimen	\بعدبیشین
\mbox	\کادربی
\mdseries	\شمایل نازک
\meaning	\معنا
\mediumseries	\نازک
\medmuskip	\فاصله متوسط ریاضی
\medskip	\پرش متوسط
\medskipamount	\مقدارپرش متوسط
\medspace	\فضای متوسط
\message	\پیام
\MessageBreak	\پیام شکن
\minrowclearance	\حداقل فاصله ردیف
\mkern	\دوری ریاضی
\month	\ماه
\moveleft	\انتقال‌بچپ
\moveright	\انتقال‌براست
\mskip	\فاصله ریاضی
\m@th	\ری@ضی
\multicolumn	\چندستونی
\multiply	\ضرب
\multispan	\چندادغام

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\muskip	\میوفاصله
\muskipdef	\تعریف میوفاصله
\@namedef	\@ترنام
\@nameuse	\@کاربردنام
\@ne	\یک@
\name	\نام
\natural	\طبیعی
\nearrow	\باریک
\nearrower	\باریکتر
\NeedsTeXFormat	\شکلبندی موردنیاز
\neg	\منفی
\negmedspace	\فضای متوسط منفی
\negthickspace	\فضای ضخیم منفی
\negthinspace	\دوری کوچک منفی
\newboolean	\بولی نو
\newbox	\کادرجدید
\newcommand	\فرمان نو
\newcount	\شمارجدید
\newcounter	\شمارنده جدید
\newdimen	\بعدجدید
\newenvironment	\محیط نو
\newfam	\خانواده جدید
\newfont	\قلم نو
\newhelp	\کمک جدید
\newif	\گرجدید
\newinsert	\درج جدید
\newlabel	\برچسب جدید
\newlength	\تعریف‌بعدجدید
\newline	\سطرجدید
\newlinechar	\نویسه سطرجدید
\newmuskip	\میوفاصله جدید
\newpage	\صفحه جدید
\newread	\بخوان جدید
\newsavebox	\تعریف کادرجدید
\newskip	\فاصله جدید
\newtheorem	\قضیه جدید
\newtoks	\جزءجدید
\newwrite	\بنویس جدید
\noalign	\بی ردیف
\nobreak	\نشکن
\nobreakspace	\فاصله نشکستنی
\nocite	\بدون سند
\noexpand	\نگستر

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\nofiles	\بدون‌پرونده
\noindent	\بدون تورفتگی
\nointerlineskip	\بی فاصله سطر
\nolimits	\بدون حد
\nolinebreak	\سطرنشکن
\nonstopmode	\پردازش‌بدون توقف
\nonfrenchspacing	\فواصل متعارف لاتین
\nonumber	\بدون شماره
\nopagebreak	\صفحه نشکن
\normalbaselines	\کرسیهای متعارف
\normalbaselineskip	\فاصله کرسی متعارف
\normalcolor	\رنگ عادی
\normalfont	\قلم عادی
\normallineskip	\فاصله سطرمتعارف
\normallineskiplimit	\حدفاصله سطرمتعارف
\normalmarginpar	\درحاشیه عادی
\normalsize	\اندازه عادی
\notag	\بدون اتیکت
\null	\نول
\nullfont	\قلم تهی
\number	\عدد
\numberline	\سطرعددی
\numberwithin	\شماره مطابق
\@evenfoot	\پایین صفحه زوج
\@evenhead	\بالای صفحه زوج
\@oddfoot	\پایین صفحه فرد
\@oddhead	\بالای صفحه فرد
\@outeqntrue	\شماره‌بیرون درست
\@outeqnfalse	\شماره‌بیرون نادرست
\obeylines	\سطربه سطر
\obeyspaces	\فضافعال
\oddsidemargin	\حاشیه فرد
\offinterlineskip	\سطوربی فاصله
\omit	\حذف
\@onlypreamble	\@تنهادرپیش درآمد
\onecolumn	\یک ستون
\onlynotes	\تنهایادداشت ها
\onlyslides	\تنهااسلایدها
\openin	\بازکن ورودی
\openout	\بازکن خروجی
\OptionNotUsed	\گزینه مصرف نشده
\or	\یا
\outer	\برونی

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\output	\صفحه‌بندی
\outputpenalty	\جریمه صفحه‌بندی
\overfullrule	\علامت سرریز
\@preamblecmds	\@فرمان های‌پیش درآمد
\p@	\@پو
\PackageError	\خطای سبک
\PackageInfo	\اطلاع سبک
\PackageWarning	\هشدارسبک
\PackageWarningNoLine	\هشدارسبک‌بی سطر
\pagebreak	\صفحه شکن
\pagecolor	\رنگ صفحه
\pagedepth	\عمق صفحه
\pagefilllstretch	\کشش‌پررصفحه
\pagefillstretch	\کشش‌پررصفحه
\pagefilstretch	\کشش‌پرصفحه
\pagegoal	\غایت صفحه
\pagename	\نام صفحه
\pagenumbering	\شماره گذاری صفحه
\pageref	\رجوع صفحه
\pagerulewidth	\ضخامت خط صفحه
\pageshrink	\فشردگی صفحه
\pagestretch	\کشش صفحه
\pagestyle	\سبک صفحه
\pagetotal	\جمع صفحه
\paperheight	\بلندای کاغذ
\paperwidth	\پهنای کاغذ
\par	\بند
\paragraph	\پاراگراف
\parallel	\موازی
\parbox	\کادرپار
\parfillskip	\فاصله ته‌بند
\parindent	\تورفتگی سربند
\parsep	\فاصله‌بندلیست
\parshape	\شکل‌بند
\parskip	\فاصله‌بند
\part	\بخش
\partname	\عنوان‌بخش
\partopsep	\فاصله‌بالای لیست‌بند
\PassOptionToClass	\ارسال گزینه‌به کلاس
\PassOptionToPackage	\ارسال گزینه‌به‌پکیج
\path	\مسیر
\patterns	\الگوها
\pausing	\مکث

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\penalty	\جریمه
\phantom	\غیب
\poptabs	\الگوی قبلی
\postdisplaypenalty	\جریمه‌پس نمایش
\predisplaydirection	\جهت‌پیش نمایش
\predisplaypenalty	\جریمه‌پیش نمایش
\predisplaysize	\اندازه‌پیش نمایش
\pretolerance	\پیش حد بد نمایی
\prevdepth	\عمق قبلی
\prevgraf	\بند قبلی
\printindex	\نمایه دراینجا
\ProcessOptions	\پردازش گزینه ها
\protect	\تامین
\providecommand	\تهیه فرمان
\ProvidesClass	\آماده سازی طبقه
\ProvidesFile	\آماده سازی‌پرونده
\ProvidesPackage	\آماده سازی سبک
\pushtabs	\ثبت الگو
\quad	\کواد
\qquad	\کوکواد
\@outputpagerestore	\@بازآیی خروج صفحه
\radical	\رادیکال
\raggedbottom	\پایین‌بی تنظیم
\raggedleft	\تنظیم ازراست
\raggedright	\تنظیم ازچپ
\raise	\انتقال‌ببالا
\raisebox	\بالابر
\raisetag	\ترفیع اتیکت
\rangle	\زاویه ر
\rceil	\سقف ر
\read	\بخوان
\ref	\رجوع
\reflectbox	\کادرقرینه
\refname	\عنوان مراجع
\refstepcounter	\گام شمارنده مرجع
\relax	\راحت
\removelastskip	\رفع آخرین فاصله
\renewcommand	\فرمان ازنو
\renewenvironment	\محیط ازنو
\repeat	\ازنو
\RequirePackage	\سبک موردنیاز
\RequirePackageWithOptions	\سبک موردنیازباگزینه
\resizebox	\کادرکشیده

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\reversemarginpar	\درحاشیه معکوس
\rfloor	\کف ر
\right	\راست
\rightmargin	\حاشیه راست
\rightmark	\علامت راست
\rightpageskip	\کادرتاراست
\rightskip	\فاصله انتهای سطر
\rmdefault	\رومن عادی
\rmfamily	\فامیل رومن
\Roman	\رومن‌بزرگ
\roman	\رومن کوچک
\romannumeral	\عددرومی
\rotatebox	\کادرچرخان
\rowcolor	\رنگ ردیف
\rule	\خط
\@secondoftwo	\@دومی ازدو
\@spaces	\@فضاها
\samepage	\همین صفحه
\savebox	\مقدارکادر
\sbox	\مقکادر
\scalebox	\کاداندازه
\scdefault	\پیش فرض تمام‌بزرگ
\scshape	\شکل تمام‌بزرگ
\scriptfont	\قلم توان
\scriptscriptfont	\قلم توان توان
\scriptscriptstyle	\سبک ته نوشت ته نوشت
\scriptsize	\اندازه‌پانویس
\scripstyle	\سبک ته نوشت
\scrollmode	\پردازش گذری
\section	\قسمت
\secdef	\تعریف قسمت
\see	\ببینید
\seealso	\نیزببینید
\seename	\نام‌ببینید
\selectfont	\قلم‌بردار
\setboolean	\تنظیم‌بولی
\setbox	\درکادر
\setcounter	\مقدارشمارنده
\setkeys	\مقدارکلیدها
\setlength	\مقداربعد
\setminus	\تنظیم منها
\SetSymbolFont	\تعریف قلم علائم
\settodepth	\تنظیم‌به عمق

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\settoheight	\تنظیم‌به ارتفاع
\settowidth	\مقداربعدبه اندازه
\sfcode	\کدضریب فاصله
\sfdefault	\پیش فرض س ف
\sffamily	\فامیل سن سریف
\shadowbox	\کادرسایه دار
\sharp	\تیز
\shipout	\بفرست
\shortstack	\پشته کوتاه
\show	\نمایش‌بده
\showbox	\نمایش‌بده کادر
\showboxbreadth	\میزان نمایش کادر
\showboxdepth	\عمق نمایش کادر
\showlists	\نمایش‌بده لیستها
\showthe	\نمایش‌بده محتوای
\simplefontmode	\حالت ساده قلم
\sixt@@n	\شانزد@
\skewchar	\نویسه اریب
\skip	\فاصله
\skip@	\فاصل@
\skipdef	\تعریف فاصله
\sl	\خوابیده
\sldefault	\پیش فرض خو
\slshape	\شکل خوابیده
\sloppy	\راحت چین
\slshape	\شمایل خو
\small	\کوچک
\smallskip	\پرش کوتاه
\smallskipamount	\مقدارپرش کوتاه
\smash	\کوب
\smile	\لبخند
\snglfntlocatecode	\کدمکان همانطور
\space	\فضا
\spacefactor	\ضریب فاصله
\spaceskip	\فاصله کلمات
\spadesuit	\پیک
\span	\ادغام
\special	\ویژه
\splitmaxdepth	\حداکثرعمق ستون
\splittopskip	\فاصله‌بالای ستون
\star	\ستاره
\stepcounter	\گام شمارنده
\stretch	\کشی

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\string	\رشته
\strut	\شمع
\strutbox	\کادرشمع
\subitem	\زیربند
\subparagraph	\زیرپاراگراف
\subsection	\زیرقسمت
\substack	\زیرپشته
\subsubitem	\زیرزیربند
\subsubsection	\زیرزیرقسمت
\subset	\زیرمجموعه
\subseteq	\زیرمجموعه مس
\supereject	\منتهای صفحه
\suppressfloats	\حذف مکان شناور
\@tempa	\@موقت آ
\@tempb	\@موقت ب
\@tempc	\@موقت پ
\@tempd	\@موقت ت
\@tempe	\@موقت 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	\فاصله‌بین 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

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\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
\textquoteleft	\نقل متنی چپ
\textquoteright	\نقل متنی راست
\textvisiblespace	\فضای نمایان متنی
\textbackslash	\شکافت‌پشت متنی
\textbar	\میله متنی
\textgreater	\بزرگ ترمتنی
\textless	\کمترمتنی
\textbf	\متن سیاه
\textcircled	\مدورمتنی
\textcolor	\رنگ متن
\textcompwordmark	\نشان کلمه مرکب متن
\textfloatsep	\فاصله متن وشناور
\textfraction	\نسبت متن
\textheight	\بلندای متن
\textindent	\متن تورفته
\textit	\متن ایتالیک
\textmd	\متن نازک
\textnormal	\متن نرمال
\textregistered	\ثبتی متنی
\textrm	\متن رومن
\textsc	\متن تمام‌بزرگ
\textsf	\متن سن سریف
\textsl	\متن خوابیده
\textstyle	\سبک متنی
\textsuperscript	\بالانویس متنی
\texttrademark	\علامت تجاری متنی
\texttt	\متن تایپ
\textup	\متن ایستاده
\textwidth	\پهنای متن
\thanks	\زیرنویس عنوان
\the	\محتوای
\thempfn	\این زیرنویس
\thicklines	\خط هاضخیم
\thickmuskip	\فاصله زیادریاضی
\thinmuskip	\فاصله کم ریاضی
\thickspace	\فضاضخیم

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\thinlines	\خط هانازک
\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	\حدبدنمایی
\top	\بالا
\topfigrule	\خطبالای شناور
\topfraction	\نسبت‌بالا
\topmargin	\حاشیه‌بالا
\topmark	\علامت‌بالا
\toppageskip	\کادرتابالا
\topsep	\فاصله‌بالای لیست
\topskip	\فاصله‌بالا
\totalheight	\بلندای کل
\tracingall	\ردگیری کل
\tracingcommands	\ردگیری فرامین
\tracinglostchars	\ردگیری حروف
\tracingmacros	\ردگیری ماکروها
\tracingonline	\ردگیری نمایشی
\tracingoutput	\ردگیری صفحه‌بندی
\tracingpages	\ردگیری صفحات
\tracingparagraphs	\ردگیری‌بندها
\tracingrestores	\ردگیری‌بازگردانی
\tracingstats	\ردگیری آمارها
\triangle	\مثلث
\ttdefault	\پیش فرض تایپ
\ttfamily	\فامیل تایپ
\tw@	\دو@
\twocolumn	\دوستون
\typein	\درنویس
\typeout	\برنویس
\uccode	\کدبزرگ
\uchyph	\تیره‌بندی‌بزرگ

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\undefined	\تعریف نشده
\underline	\زیرخط
\unhbox	\بی کادرا
\unhcopy	\بی کپی ا
\unitlength	\واحدطول
\unkern	\برگشت دوری
\unpenalty	\برگشت جریمه
\unskip	\برگشت فاصله
\unvbox	\بی کادرو
\unvcopy	\بی کپی و
\updefault	\پیش فرض ایستاده
\upshape	\شکل ایستاده
\usebox	\ازکادر
\usecounter	\باشمارشگر
\usefont	\گزینش قلم
\usepackage	\سبک لازم
\@vobeyspaces	\@فضاهای فعال
\@void	\@تهی
\vadjust	\تنظیم و
\valign	\ردیف و
\value	\محتوای شمارنده
\vbadness	\بدنمایی و
\vbox	\کادرو
\vcenter	\کادروسط
\verb	\همانطور
\vfil	\پرو
\vfill	\پررو
\vfilneg	\رفع پرو
\vfuzz	\پرزعمودی
\visible	\نمایان
\vline	\خط عمود
\voffset	\حاشیه و
\voidb@x	\ک@درتهی
\vpageref	\ارجاع صفحه ع
\vrboxsep	\فاصله وگرد
\vref	\ارجاع ع
\vrule	\خط و
\vsize	\طول صفحه
\vskip	\فاصله و
\vspace	\فضای و
\vsplit	\شکست و
\vss	\هردوو
\vtop	\کادرگود

Continued on next page

Command in TEX or LATEX	Equivalent Persian Command
\wd	\عرض
\whiledo	\مادام‌بکن
\widehat	\کلاه‌پهن
\widetilde	\مدپهن
\widowpenalty	\جریمه ته‌بند
\width	\پهنا
\wlog	\درکارنامه
\write	\بنویس
\@xobeysp	\@فضای لاتین
\@xxxii	\سی@دو
\xdef	\ترگع
\xleaders	\نشانگرگسترشی
\xspaceskip	\فاصله اضافی کلمات
\year	\سال
\z@	\@فر
\z@skip	\@فرفاصله

Table 2: The Equivalent XePersian Commands

Command in XePersian	Equivalent Persian Command
\autofootnoterule	\خط زیرنویس خودکار
\AutoMathDigits	\اعداد فرمولها خودکار
\DefaultMathDigits	\اعداد فرمولها لاتین
\deflatinfont	\تعریف قلم لاتین
\defpersianfont	\تعریف قلم پارسی
\hboxL	\کادر چپ
\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	\چپ‌براست
\LTRdblcol	\دوستونی چپ
\LTRfootnote	\پانویس
\LTRfootnotetext	\متن‌پانویس
\LTRthanks	\پانویس عنوان
\persianday	\روز پارسی
\persianfont	\قلم‌پارسی
\PersianMathDigits	\اعداد فرمولها پارسی
\persianmonth	\ماه پارسی

Continued on next page

Command in XePersian	Equivalent Persian Command
\persianyear	\سال‌پارسی
\plq	\علامت‌چپ‌نقل‌قول‌پارسی
\prq	\علامت‌راست‌نقل‌قول‌پارسی
\rightfootnoterule	\خط‌زیرنویس‌راست
\rl	\متن‌پارسی
\RLE	\راست‌بچپ
\RTLdblcol	\دوستونی‌راست
\RTLfootnote	\پانوشت
\RTLfootnotetext	\متن‌پانوشت
\RTLthanks	\پانوشت‌عنوان
\@SepMark	\@علامت‌بین
\SepMark	\علامت‌بین
\setdefaultbibitems	\بگذارمرجوعات‌عادی
\setdefaultmarginpar	\بگذاردرحاشیه‌عادی
\setmathdigitfont	\گزینش‌قلم‌اعدادفرمولها
\setfootnoteLR	\بگذارزیرنویس‌چپ
\setfootnoteRL	\بگذارزیرنویس‌راست
\setlatintextfont	\گزینش‌قلم‌لاتین‌متن
\setLTR	\بگذارمتن‌چپ
\setLTRbibitems	\بگذارمرجوعات‌چپ
\setLTRmarginpar	\بگذاردرحاشیه‌چپ
\setRTL	\بگذارمتن‌راست
\setRTLbibitems	\بگذارمرجوعات‌راست
\setRTLmarginpar	\بگذاردرحاشیه‌راست
\settextfont	\گزینش‌قلم‌متن
\textwidthfootnoterule	\خط‌زیرنویس‌پهنای‌متن
\twocolumnstableofcontents	\فهرست‌مطالب‌دوستونی
\unsetfootnoteRL	\نگذارزیرنویس‌راست
\unsetLTR	\نگذارمتن‌چپ
\unsetRTL	\نگذارمتن‌راست
\vboxL	\کادروازچپ
\vboxR	\کادروازراست
\XeLaTeX	\زی‌لاتک
\XePersian	\زی‌پرشین
\xepersianversion	\گونه‌زی‌پرشین
\xepersiandate	\تاریخ‌گونه‌زی‌پرشین
\XeTeX	\زی‌تک

Table 3: The Equivalent LaTeX Environments

Environment in LaTeX	Equivalent Persian Environment
abstract	چکیده
appendix	پیوست
array	آرایه

Continued on next page

Environment in LaTeX	Equivalent Persian Environment
center	وسط چین
description	توضیح
displaymath	ریاضی نمایشی
document	نوشتار
enumerate	شمارش
figure	شکل
figure*	شکل*
filecontents	محتوای‌پرونده
filecontents*	محتوای‌پرونده*
flushleft	چپ چین
flushright	راست چین
itemize	فقرات
letter	نامه
list	لیست
longtable	جدول دراز
lrbox	کادررچ
math	ریاضی
matrix	ماتریس
minipage	صفحه کوچک
multicols	چندستونی ها
multline	چندخطی
note	یادداشت
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	لیست‌بدوی
verbatim	همانطورکه هست
verbatim*	همانطورکه 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 postion 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 LaTeX position arguments

Position argument in LaTeX	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 `p`s 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
draft	پیش نویس
origin	مبدا
clip	بی اضافه
keepaspectratio	حفظ تناسب

Continued on next page

Original Key	Equivalent Persian Key
natwidth	پهنای طبیعی
natheight	بلندای طبیعی
bb	مختصات
viewport	محدوده نمایش
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	چ
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

Continued on next page

Original font feature	Equivalent Persian font feature
SlantedFont	قلم خوابیده
BoldSlantedFont	قلم خوابیده سیاه
SmallCapsFont	قلم کلاه کوچک
UprightFeatures	ویژگی های قلم عمودی
BoldFeatures	ویژگی های قلم سیاه
ItalicFeatures	ویژگی های قلم ایتالیک
BoldItalicFeatures	ویژگی های قلم ایتالیک سیاه
SlantedFeatures	ویژگی های قلم خوابیده
BoldSlantedFeatures	ویژگی های قلم خوابیده سیاه
SmallCapsFeatures	ویژگی های قلم کلاه کوچک
SizeFeatures	ویژگی های اندازه
Scale	ضریب
WordSpace	فضای کلمه
PunctuationSpace	فضای نقطه گذاری
FontAdjustment	تنظیم قلم
LetterSpace	فضای حرف
HyphenChar	نویسه تیره
Color	رنگ
Opacity	کدری
Mapping	نگاشت
Weight	سنگینی
Width	پهنا
OpticalSize	اندازه چشمی
FakeSlant	خوابیده تقلبی
FakeStretch	کشش تقلبی
FakeBold	سیاه تقلبی
AutoFakeSlant	خوابیده تقلبی خودکار
AutoFakeBold	سیاه تقلبی خودکار
Ligatures	دو یا چند حرف متصل به هم
Alternate	متناوب
Variant	گوناگون
Variant	مجموعه سبکی
CharacterVariant	گوناگونی نویسه
Style	سبک
Annotation	یادداشت
RawFeature	ویژگی های کال
CharacterWidth	پهنای نویسه
Numbers	ارقام
Contextuals	متنی
Diacritics	تفکیک کننده ها
Letters	حروف
Kerning	دوری
VerticalPosition	موقعیت عمودی

Continued on next page

Original font feature	Equivalent Persian font feature
Fractions	کسر

Table 9: Persian Equivalent font feature options

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

2.5 A Sample Input TEX File

```
\documentclass{article}
\usepackage{xepersian}
\settextfont{XB Niloofar}
\title{یک سند نمونه}
\author{نام نویسنده}
\begin{document}
\maketitle
\tableofcontents
\part{عنوان بخش}
...
\section{عنوان قسمت}
...
\subsection{عنوان زیرقسمت}
...
\subsubsection{عنوان زیر زیرقسمت}
...
\end{document}
```

2.6 Font Commands

2.6.1 Basic Font Commands

\settextfont [Options] {⟨*font name*⟩}
\setlatintextfont [Options] {⟨*font name*⟩}
\setmathdigitfont [Options] {⟨*font name*⟩}
\setmathsfdigitfont [Options] {⟨*font name*⟩}
\setmathttdigitfont [Options] {⟨*font name*⟩}

☞ Options in any font command in this documentation are anything that fontspec package provides as the option of loading fonts, except `Script` and `Mapping`.

☞ `\settextfont` will choose the default font for Persian texts of your document.

☞ `\setlatintextfont` will choose the font for Latin texts of your document. If you do not use this command at all, the default TEX 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.

☞ `\setmathsfdigitfont` 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).

☞ `\setmathttdigitfont` will choose the Persian font for digits in math mode inside `\mathtt`. By using this command, digits in math mode inside `\mathtt` will appear in Persian form and if you do not use this command at all, you will get default TEX font for digits in math mode inside `\mathtt` and digits appear in their original form (Western).

2.6.2 Defining Extra Persian and Latin Fonts

```
\defpersianfont\CS [Options] {⟨font name⟩}
\deflatinfont\CS [Options] {⟨font name⟩}
```

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

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

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

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

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

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

2.6.3 Choosing Persian Sans Font

```
\setpersiansansfont [Options] {⟨font name⟩}
\persiansffamily  \textpersiansf{⟨text⟩}
```

2.6.4 Choosing Persian Mono Font

```
\setpersianmonofont [Options] {⟨font name⟩}
\persianttfamily  \textpersiantt{⟨text⟩}
```

2.6.5 Choosing Persian Iranic Font

```
\setiranicfont [Options] {⟨font name⟩}
\iranicfamily  \textiranic{⟨text⟩}
```

2.6.6 Choosing Persian Navar Font

```
\setnavarfont [Options] {⟨font name⟩}
\navarfamily  \textnavar{⟨text⟩}
```

2.6.7 Choosing Persian Pook Font

```
\setpookfont [Options] {⟨font name⟩}
\pookfamily  \textpook{⟨text⟩}
```

2.6.8 Choosing Persian Sayeh Font

```
\setsayehfont [Options] {⟨font name⟩}
\sayehfamily  \textsayeh{⟨text⟩}
```

2.6.9 Choosing Latin Sans Font

```
\setlatinsansfont [Options] {⟨font name⟩}
\sffamily  \textsf{⟨text⟩}
```

2.6.10 Choosing Latin Mono Font

```
\setlatinmonofont [Options] {⟨font name⟩}
\ttfamily  \texttt{⟨text⟩}
```

3 Latin and Persian Environment

```
\begin{latin}  ⟨text⟩  \end{latin}
\begin{persian}  ⟨text⟩  \end{persian}
```

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

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

3.1 latinitems and parsiitems environments

```
\begin{latinitems}
  \item ⟨text⟩
  ...
\end{latinitems}
```

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

```
\begin{parsiitems}
  \item ⟨text⟩
  ...
\end{parsiitems}
```

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

3.2 Short Latin and Persian Texts

```
\lr{⟨text⟩}  \rl{⟨text⟩}
```

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

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

3.3 Miscellaneous Commands

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

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

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

☞ `\persianday` is Persian equivalent of `\day`.

☞ `\today` typesets current Persian date and `\latintoday` typesets current Latin date.

☞ `\twocolumnstableofcontents` typesets table of contents in two columns. This requires that you have loaded multicol package before XePersian package, otherwise an error will be issued.

☞ `\XePersian` typesets XePersian's logo.

☞ `\plq` and `\prq` typeset Persian left quote and Persian right quote respectively.

3.4 New Commands

```
\Latincite
```

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

3.5 Additional Counters

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

`\harfinumeral{`⟨*integer*⟩`}`	`\adadinumeral{`⟨*integer*⟩`}`	`\tartibinumeral{`⟨*integer*⟩`}`

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

3.6 Things To Know About `\setmathdigitfont`, `\setmathsfdigitfont`, and `\setmathttdigitfont`

`\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, `\setmathsfdigitfont`, and `\setmathttdigitfont` 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`, `\setmathsfdigitfont`, and `\setmathttdigitfont`, 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

```
\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 ا, ی, 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`, ا, ی, 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[2] a magazine just load the class as usual[3], 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.

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

[3] 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.

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{`⟨*title*⟩`}{`⟨*opening*⟩`}{`⟨*time*⟩`}`

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{`⟨*title*⟩`}{`⟨*subtitle*⟩`}{`⟨*opening*⟩`}{`⟨*pagesof*⟩`}{`⟨*time*⟩`}`

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{`⟨*title*⟩`}{`⟨*subtitle*⟩`}{`⟨*opening*⟩`}{`⟨*pagesof*⟩`}{`⟨*time*⟩`}`

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 ⟨*title*⟩ and places a title over the index block. To add entries inside the index just type

`\indexitem{`⟨*title*⟩`}{`⟨*reference*⟩`}`

inside the environment. The ⟨*title*⟩ is the index entry text and the ⟨*reference*⟩ 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 ⟨*title*⟩ 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{`⟨*image*⟩`}{`⟨*day-name*⟩`}{`⟨*max*⟩`}{`⟨*min*⟩`}{`⟨*short-des*⟩`}`

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

6.1.4 Inside

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

6.1.5 The article environment

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

```
\begin{article}{⟨num-of-columns⟩}{⟨title⟩}{⟨subtitle⟩}{⟨pagesof⟩}{⟨label⟩}
…⟨text⟩…
\end{article}
```

The first argument ⟨*num-of-columns*⟩ sets the number of columns the article will

be divided whereas ⟨*label*⟩ is used when pointing an article from the index in the front page. The rest of the arguments are easy to understand.
Inside the `article` environment, besides the main text of the article, it is possible to include additional information using several class commands.

`\authorandplace` `\timestamp`

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

`\image`

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

`\image{`⟨*image*⟩`}{`⟨*description*⟩`}`

`\columntitle` `\expandedtitle`

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

`\columntitle{`⟨*type*⟩`}{`⟨*text*⟩`}`
`\expandedtitle{`⟨*type*⟩`}{`⟨*text*⟩`}`

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

6.1.6 The editorial environment

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

`\begin{editorial}{`⟨*num-of-columns*⟩`}{`⟨*title*⟩`}{`⟨*author*⟩`}{`⟨*label*⟩`}`
…⟨*text*⟩…
`\end{editorial}`

All arguments have the same meaning as article environment (see subsubsec-

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

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

6.1.8 Commands between articles

`\articlesep` `\newsection`

There are two commands you can use among the articles inside xepersian-magazine: `\articlesep` and `\newsection`. The first one does not take any parameter and just draws a line between two articles. The second changes the content of `\xepersian@section` to the new ⟨*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 LaTeX commands, using `\renewcommand` to change their behaviour.

6.1.10 Front Page

`\customlogo` `\custommінilogo` `\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⟩}
\custommінilogo{⟨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 LaTeX class I added the macro `\innerTextFinalMark` to change this black square. This item will appear always following the last character of the text with the~ character.

`\minraggedcols` `\raggedFormat`

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

`\heading` `\foot`

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

`\heading{`⟨*left*⟩`}{`⟨*center*⟩`}{`⟨*right*⟩`}`
`\foot{`⟨*left*⟩`}{`⟨*center*⟩`}{`⟨*right*⟩`}`

If you still prefer to use fancyhdr macros, use them after the `frontpage` environment.
xepersian-magazine by default places no headers and footers. If you want headers and foooters, 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 LaTeX. 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:

```
\begin{question}{سؤال}
\false جواب ۱
\true جواب ۲
\false جواب ۳
\false جواب ۴
\end{question}
\begin{correction}
جواب واقعی و علت اینکه این جواب، جواب واقعی هست
\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 LaTeX 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 LaTeX 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 occur-

rence 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.