

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/tex-persian/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/tex-persian/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 2 ε , using XeT \LaTeX engine

User documentation for version 23.3

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Introduction

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

Important Notes 1.1

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

XePersian Info On The Terminal and In The Log File

If you use XePersian package to write any input TFX 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--2022 Vafa Khalighi
* Copyright (c) 2018--2020 bidi-tex GitHub Organization
* v23.3, 2022/02/04
* License: LaTeX Project Public License, version
* 1.3c or higher (your choice)
* Location on CTAN: /macros/xetex/latex/xepersian
* Issue tracker: https://github.com/tex-persian/xepersian/issues
* Discussions: https://github.com/tex-persian/xepersian/discussions
* Support Email: tex-persian@vafa.ac
```



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:

- 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 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:

```
\documentclass{minimal}
\usepackage{xepersian}
\usepackage{enumerate}
\settextfont{XB Niloofar}
\begin{document}

اين فقط يک آزمايش است
\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

```
{\tt defaultlatinfontfeatures} = \! \langle \textit{value} \rangle
```

The defaultlatinfontfeatures option allows you to pass font features to the main Latin font. $\langle value \rangle$ is a set of font features.

2.4.2 extrafootnotefeatures Option

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

2.4.3 Kashida Option

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

Note that you can not use Kashida option when you are using Nastaliq-like font (well, you

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:

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



\KashidaOn \KashidaOff

- \KashidaOn enables Kashida and is active by default when Kashida option is activated.
- ₩ \KashidaOff disables Kashida.

2.4.4 quickindex Option

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

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

2.4.5 quickindex-variant1 Option

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

2.4.6 quickindex-variant2 Option

Same as quickindex Option but uses variant two (in which $\tilde{1}$ is a separate letter) for sorting Persian alphabets.

2.4.7 localise Option

This option allows you to use most frequently-used LTEX 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 LTEX and TEX commands and environments. The Persian equivalents of LTEX and TEX commands are shown in Table 1, The Persian equivalents of XePersian commands are shown in Table 2, Persian equivalents of LTEX environments are shown in Table 3 and Persian equivalents of XePersian environments are shown in Table 4

Please note that the Persian equivalents of Lax 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 LeTeX and TeX commands and environments, but still original LeTeX and TeX commands and environments work too.

The TeX LeTeX 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 \.\delta \chapter has a starred version, so this means *\delta \chapter \chapt

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:



Table 1: The Equivalent \LaTeX and $T_{\hbox{\scriptsize E}}X$ Commands

Command in TEX or LATEX	Equivalent Persian Command
\@arstrut	√شمعجدول
\above	\فوق
\abovedisplayshortskip	\فاصله <i>کو</i> تاهبالا <i>ی</i> نمایش
\abovedisplayskip	\فاصلەبالا <i>ى</i> نمايش
\abstractname	\عنوانچکیده
\accent	\اکسنت
\active	\فعا <i>ل</i>
\addcontentsline	\بيفزاسطرفهرست
\addpenalty	\اضافهبرجريمه
\address	\نشان <i>ي</i>
\addtocontents	\بيفزابەفھرست
\addtocounter	\اضافەبرشمارندە
\addtolength	\اضافەبربعد
\addvspace	\بیفزافضا <i>ی</i> و
\adjdemerits	\تنظیم بدنمایی
\advance	\بيفزابر
\afterassignment	\بعداًزانتساب
\aftergroup	\بعدازگروه
\aleph	∖الف
\aliasfontfeature	\خصيصهمستعارقلم
$\aligned alias font feature option$	\انتخابخصيصهمستعارقلم
\allowbreak	\شكستني
\alloc@	\تخ <i>مى</i> @
\allocationnumber	\تخصيص يافته
\allowdisplaybreaks	\شكستنمِايشمجاز
\Alph	\حروفبِزرگِ
\alph	\حروف کوچک
\alsoname	\نامهمچنین
\and	\e_
\angle	∖زاویه
\appendixname	\عنوانپيوست
\approx	\تقریب ·
\arabic	\عربی
\arg	\آر <i>گ</i>
\arrayrulecolor	\رنگخطجدول
\arraycolsep	\فاصلەستونهاى آرايە
\arrayrulewidth	\ضخامتخطجدول
\arraystretch	\کشیدگ <i>ی</i> آرایه
\AtBeginDocument	\درآغازنوشتار
\AtEndDocument	\درپایاننوشتار



AtEndofClass	Command in TEX or LATEX	Equivalent Persian Command
author	\AtEndOfClass	
backmatter	\AtEndOfPackage	\درانتها <i>ی</i> سبک
\backslash \badness \bar \daubes \bar \baselineskip \baselineskip \baselinestretch \batchmode \begin \begin \begin \beginR \begingroup \belowdisplayshortskip \bfelowdisplayshortskip \bfelowdisplayshortskip \bfelowdisplayship \bibitem \bibliography \bibliography \bibliography \bibliography \bibliography \bibliography \bibliography \bibliography \bibliome \bigskip \bigskip \bottomfraction \box \box \boxmaxdepth \break \bullet \cappacate	\author	
\backslash \badness \bar \daubes \bar \baselineskip \baselineskip \baselinestretch \batchmode \begin \begin \begin \beginR \begingroup \belowdisplayshortskip \bfelowdisplayshortskip \bfelowdisplayshortskip \bfelowdisplayship \bibitem \bibliography \bibliography \bibliography \bibliography \bibliography \bibliography \bibliography \bibliography \bibliome \bigskip \bigskip \bottomfraction \box \box \boxmaxdepth \break \bullet \cappacate	\backmatter	\مطّلبيشت
\badness \ bar \ alubaselineskip \ baselineskip \ baselineskip \ baselinestretch \ batchmode \ begin \ begin \ begin \ beginR \ begingroup \ belowdisplayshortskip \ belowdisplayshortskip \ belowdisplayskip \ bibtem \ botomark \ bibliography \ bibliography \ bibliography \ bibliography \ bibliography \ bibliography \ bibtomark \ bottompageskip \ bottomfraction \ box \ boxmaxdepth \ break \ bullet \ Qcclv \ (cctota) \ (cctota) \ (cctota) \ (cctota) \ (cotota)		
\baselineskip \baselinestretch \batchmode \begin \begin \beginL \beginR \begingroup \belowdisplayshortskip \belowdisplayskip \bf \bfdefault \bfaren \begroup \bibliography \bibliograph		
blaselinestretch baselinestretch batchmode common block		
baselinestretch		
begin begingroup belowdisplayshortskip belowdisplayskip belowdisplayskip bif bif bif bibliography bibliography bibliography bibliography bibliography bibgskip bigskip bottomfraction box box boxmaxdepth biblied bottomfraction box box box catcode cc cc cc cc cc cc cc	-	
begin begin begin begin begin begin begin content begin begingroup belowdisplayshortskip belowdisplayskip belowdisplayskip bif bif bibliography bibliography bibliography bibliography bibgskip bigskip bigskip bottomfraction box box box box cartode cet		
hegink		
hegingroup	_	
begingroup belowdisplayshortskip belowdisplayskip belowdisplayskip belowdisplayskip belowdisplayskip bif alima bibliography bibliography bibliography bibliography bibliography bigskip bigskip bottomfraction box boxmaxdepth break bullet Qcclv Ccqtom catcode cc ccname cdot cdots centerline centerli	_	
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\belowdisplayskip \bf		
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\catcode \cc \cc \ccname \cdot \cdot \cdots \cidedemed \centering \centerline \centerline \ch@ck		•
\cc \ccname \cdot \cdot \cdot \centering \centerline \cdot \cdots \centerline \centerline \cdots \centerline \centerline \ch@ck		
\ccname انامرونوشت \cdot \cdots \centering \centerline \centerline \centerline \ch@ck \centerline	\catcode	
\cdot \ القطهوسط \ cdots \ القاطوسط \ القطوسط \ القطيم ازوسط \ centering \ الفطوسط \ خطوسط \ الفروسط \ الفروسط \ الفروس \ الفروس الفروس \ الفروس الف	\cc	
\centering \centerline \cente	\ccname	
\centering \centerline \centerline \ch@ck \centerline \ch@ck	\cdot	-
\centerline \ch@ck \ch@ck \ch@ck		
\ch@ck	\centering	
	\centerline	
\chanter .aå\		
Continued on next page	\chapter	\فصل



Command in T _E X or L ^A T _E X	Equivalent Persian Command
\chaptername	\عنوان فصل
\char	∖نویسه
\chardef	\تعریفنویسه
\CheckCommand	\برسىفرمان
\cite	\م <i>رجع</i>
\ClassError	\خطا <i>ى</i> طبقه
\ClassInfo	\اطلاع طبقه
\ClassWarning	\هشـدارطبقه
\ClassWarningNoLine	\هشدارطبقهب <i>ی</i> سطر
\cleaders	∖نشانگرمرکزی
\cleardoublepage	\دوصفحه ياک
\clearpage	\صفحهياک
\cline	\خطناير
\closein	`ببندورو <i>دی</i>
\closeout	\ببندخُرُوجي
\closing	\بستن
\clubpenalty	\جريمه سربند
\clubsuit	\خَاجَ
\colbotmark	\علامت ياپين ستون اول
\colfirstmark	\علامت أول ستون أول
\color	\رن <i>گ</i>
\colorbox	\کُادررنگ
\coltopmark	\علامتُ بالاي ستون اول
\columncolor	\رن <i>گ</i> ستون
\columnsep	\بين ستون
\columnwidth	\پهنا <i>ی</i> سـُتون
\columnseprule	\ [.] خطبي <i>ن</i> ستون
\contentsline	\سطرفهرست
\contentsname	\عنوان فهرست مطالب
\copy	\ک <i>ي</i>
\copyright	\ح <i>ٰ</i> ق تاليف
\count	\شمار
\count@	\شمار @
\countdef	\تعریفشمار
\cr	\سخ
\crcr	√سخسخ
\csname	\نام فرمان
\CurrentOption	\گزینه جار <i>ی</i>
\dashbox	\كادربينابي <i>ن</i>
\dashv	\بينابي <i>ن</i> ع
\@date	\@تاريخً
\date	\تاريخ ً
\day	\روز
\dblbotfigrule	\خُطُپایین شناورپهن
\dblbottomfraction	\نسبت پهن پايين
\dblfigrule	\خطبالای شناورپهن
	Continued on next page

خطبالای شناورپهن\ Continued on next page



Command in TEX or LaTEX	Equivalent Persian Command
\dblfloatpagefraction	∖نسبت صفحه شناورپهن
\dblfloatsep	\فاصلەبى <i>ن</i> شناورپھن ٰ
\dblfntlocatecode	\كدمكانغيرهمانطور
\dbltextfloatsep	∖فاصلهمتن وشناور پهن
\d	\نسبتپهنبالا
\DeclareFixedFont	\اعلان قلّم ثابت
\DeclareGraphicsExtensions	\اعلانپسـوند <i>گر</i> افیک
\DeclareGraphicsRule	\اعلان ٰدستورگرافیک
\DeclareOldFontCommand	∖اعلان فرمان قلم قدیمی
\DeclareOption	∖اعلان گزینه
\DeclareRobustCommand	\اعلان فرمان قو <i>ی</i>
\DeclareSymbolFont	\اعلانقلمعلائم
\deadcycles	\دوربسته
\def	\تر
\define@key	∖تعریف@کلید
\definecolor	\تعریفرنگ
\deg	\درجه
\delcode	∖کدجداساز
\delimiter	\جداساز
\delimiterfactor	∖ضریبجداساز
\depth	\ <i>گودى</i>
\diamondsuit	∖خشت
\dim	\ابعاد
\dimen	\بعد
\dimen@	\بعد@
\dimen@i	\بعد@یک
\dimen@ii	\بعد@دو
\dimendef	∖تعریفبعد
\discretionary	\تیرهگذاری
\displaybreak	∖شکستنمایش
\displayindent	∖تورفت <i>گی</i> نمایش
\displaystyle	\سب <i>ک</i> نمایش
\displaywidth	\عرضنمايش
\divide	∖تقسیم
\documentclass	\طبقە نوشتار
\do	\ک <i>ن</i>
\dospecials	∖تعویض کدها
\dot	\نقطُه
\doteq	∖نقطەمساوى
\dotfill	\يرنقطها
\dots	∖نْقاٰط
\doublebox	` کادردولا
\doublerulesepcolor	`\رنگُفاُصلەدوخطجدول
\doublerulesep	\فَاصلەبي <i>ن</i> دوخُط ۚ
\downarrow	
\dp	\فلشپايين \عمق
-	Continued on next page



Command in TEX or LATEX Equivalent Persian Command \dump ∖تخلیه \ترگ \edef \یاگروه \egroup \eject \انتها*ي*فاصله \else ∖گرنه ∖تاكيد \em \emergencystretch \کشش لاجرم ∖موکد \emph \@empty \@پوچ \empty ∖پوچ \emptyset \مجموعهيوچ \پایان \end \endL \پايان چپ \endR \پایانراست \endcsname \یایاننام فرمان \endfirsthead \يايان اولين *سر* \endfoot \یایانیا \endgraf ∖تەبند \یایان گروه \endgroup \endhead \يايانس*ر* \endinput \پایانورود*ی* \endlastfoot \یایان آخرینیا \ڭسترشاين صفحه \enlargethispage ∖تەسطر \endline ∖نویسەتەسطر \endlinechar \enspace \ان*دورى* \ا*ن*فاصله \enskip \eqcommand \فرمان *ج*انشين \محيط جانشين \eqenvironment ∖ارجاعفر \eqref \errhelp \کمک خطا ∖يبامخطا \errmessage \errorcontextlines \سطرمتن خطا \يردازش توقف خطا \errorstopmode \escapechar ∖نویسهویژه \euro ∖يورو \evensidemargin \حاشيهزو**ج** \everycr ∖هرسخ \everydisplay ∖هرکادرا \everyhbox ∖هرکار \everyjob \هررياضي \everymath \everypar ∖هربند ∖هرکادرو \everyvbox \اجرا*ی*گزینهها \ExecuteOptions \exhyphenpenalty \جریمه اضافی تیره بندی Continued on next page



Command in TEX or LATEX	Equivalent Persian Command
\expandafter	\بگسترپ <i>س</i> از
\extracolsep	\فاصله اضافیبین ستونها
\@firstofone	\@اول <i>ى</i> ازیک
\@firstoftwo	\@اول <i>ى</i> از <i>د</i> و
\f@ur	\چ@ار
\fam	\خانواده
\fancypage	∖صفحه تجملی
\fbox	\كادربا
\fboxrule	∖ضخامت کادربا
\fboxsep	√حاشیه کادربا
\fcolorbox	\کادربارنگ ُ
\fi	\رگ ُ
\figurename	\عُنوان شكل
\filbreak	\پرش <i>ُ</i> کن
\fill	`پُر`
\firstmark	\غلامت اول
\flat	\يهن
\floatpagefraction	\نسبتصفحهشناور
\floatingpenalty	\جريمەشناور
\floatsep	\فاصلەبين شناور
\flushbottom	\تنظيم اُزْيايين
\fmtname	\شكلبندي "
\fmtversion	\ردەشكلبندى
\fnsymbol	\نُشانه ُ
\font	√قلم
\fontdimen	\بعد ُقلم
\fontencoding	\رمزينه قلم
\fontfamily	∖فامیل قلم ٌ
\fontname	\نامقلم
\fontseries	∖شـمایلقلم
\fontshape	\شك <i>ل</i> قلم
\fontsize	\اندازهقلم
\footheight	\بلندا <u>ٰی</u> پایین صفحه
\footins	\درجزیرنویس
\footnote	∖زیرنویس
\footnotemark	\علامتزيرنويس
\footnoterule	\خطزيرنويس
\footnotesep	∖فاصلەتازىرنويس
\footnotesize	\اندازهزیرنویس
\footnotetext	\متنزيرنويس
\footskip	\فاصله تاپایی <i>ن</i> صفحه
\frame	∖فریم
\framebox	\كاُدر ٰباخط
\frenchspacing	∖فواصلیکنواختلاتین
\frontmatter	\مطلبپیش
\futurelet	\بعدبگذار

\بعدبگذار Continued on next page



Command in TEX or LATEX Equivalent Persian Command \@gobble ∖@خورحريصانه \@خورحريصانه*د*و \@gobbletwo \@خورحريصانهچهار \@gobblefour \@gtempa ∖@عاقتآ \@gtempb ∖@عاقتب \gdef ∖ترع \GenericInfo \الگوىهشدار \GenericWarning \GenericError \الگو*ى*خطا \global \عام \تعاريفعام \globaldefs \لغت نامه \glossary \فقرهفرهنگ \glossaryentry \خوششك*ن* \goodbreak \graphpaper \كاغذگراف \guillemotleft \گيومهچپ \guillemotright ∖گیومهراست \گيومەتك*ى*چپ \guilsinglleft \گيومه تكي راست \guilsinglright \halign \hang ∖بروتو \hangafter \hangindent \hbadness ∖کادرا \hbox \headheight \بلندا*ی*سرصفحه \headsep \فاصله|زسرصفحه \headtoname ∖سربەنام \heartsuit ∖دل ∖ىلندا \height \hfil ∖پرا \hfill \پررا \hfilneg \رفع پرا \پرزافقی \hfuzz \فاصله مخفى \hideskip \hidewidth \عرضپنهان \hline ∖خطیر \hoffset ∖حاشیها \حفظدرج \holdinginserts \فاصله اگرد \hrboxsep ∖خطا \hrule \hrulefill ∖پرخطا \hsize ∖طولسطر ∖فاصلها \hskip \فضا*ی*ا \hspace

\hss

Continued on next page



∖هردوا

Command in TEX or LATEX	Equivalent Persian Command
\ht	\ارتفاع
\huge	\بزر <i>گ</i>
\Huge	\بزر <i>گ</i> تر
\hyperlink	\ابرپيوند
\hypersetup	\بارگُذار <i>ی</i> ابر
\hypertarget	\هدفابر
\hyphenation	\تیرہبندی
\hyphenchar	∖نویسه تیره
\hyphenpenalty	\جریمه تیرهبندی
\@ifclassloaded	∖@گرکلاسفراخوانیشده
\@ifdefinable	∖@گرترشدنی
\@ifnextchar	\@گرنویسەبعد <i>ی</i>
\@ifpackageloaded	\@گرسبکفراخوان <i>ی</i> شده
\@ifstar	∖@گرستاره
\@ifundefined	∖@گرتعریفنشده
\if	\گر
\if@tempswa	∖گر@سواقتآ
\ifcase	\گرانواع
\ifcat	∖گررده
\ifdefined	\گرتعریفشده
\ifdim	\گربعد
\ifeof	\گرتەپروندە
\iff	∖گرر
\iffalse	\گرنادرست
\IfFileExists	\گرپروندهموجود
\ifhbox	\گرکادرا
\ifhmode	\گرحالت!
\ifinner	\گردرونی
\ifmmode	\گرحالتریاض <i>ی</i>
\ifnum	\گرعدد
\ifodd	\گرفرد
\ifthenelse	\گِرآنگاهدیگر
\iftrue	\گردرست
\ifvbox	\گرکادرو
\ifvmode	\گرحالت و
\ifvoid	\گرتھی
\ifx	\گرتام
\ignorespaces	\فاصلەخال <i>ى</i> راندىدەبگىر
\immediate	\فوري
\include	\شام <i>ل</i>
\includegraphics	\درج تصوير
\includeonly	\مشمولين
\indent	\تورفت <i>گی</i>
\index	\درنمایه
\indexentry	∖استعلام ِ
\indexname	∖عنوان نمایه



Command in TEX or LATEX	Equivalent Persian Command
\indexspace	\فاصله رهنما
\input	\ورو <i>دى</i>
\InputIfFileExists	\ورودپرونده <i>گر</i> موجود
\inputlineno	\شماره سطرورود <i>ی</i>
\insert	\درج
\insertpenalties	\جريمهدرج
\interfootnotelinepenalty	\جريمەبينسطرھا <i>ي</i> زيرنويس
\interdisplaylinepenalty	\جریمهبین سطرهای نمایش
\interlinepenalty	\جريمەبين سطرھا
\intertext	\متنداخلی
\intertextsep	\فاصلهشناوردرمتن
\invisible	\مخفى
\itdefault	\پیش َفرض ا <i>ی</i>
\itshape	\شُكل ايُتاليك
\item	∖فقرہ ٰ
\itemindent	\تورُفتگ <i>ی</i> فقرہ
\itemsep	\فاُصُله فَقَره ۗ
\iterate	\تكرارك <i>ن</i> ً
\itshape	\شكُلُ ا <i>ي</i>
\jobname	\نام کار
\jot	\قلتٰ `
\kern	\دور <i>ْی</i>
\kill	\الكُو
\label	\برچُسب
\labelenumi	\برچٌسب شمارشیک
\labelenumii	\برچٌسب شمار <u>ُش</u> ۛ دُو
\labelenumiii	\برچسبشمارشسه
\labelenumiv	\برچسبشمارشچهار
\labelitemi	\برچسبفقرەپک \برچسب
\labelitemii	\برچسبفقرهدو \برچسب
\labelitemiii	\برچسبفقرەسە \برچسب
\labelitemiv	\برچسبفقرهچهار
\labelsep	\فاصله ازبرچس ^ب
\labelwidth	\پهنایبرچسٰب
\language	\زبان
\large	\درشت
\Large	\درشت تر
\LARGE	\درشتدرشت
\lastbox	\آخری <i>ن</i> کادر
\lastkern	\آخری <i>ن</i> دور <i>ی</i>
\lastpenalty	\آخری <i>ن</i> جریمه
\lastskip	∖آخرینفاصله
\LaTeX	\لاتکُ
\LaTeXe	\لات <i>ک</i> ای
\lccode	\کدکوچک
\ldots	\نقاط ُخ ْ
	Continued on next page



(Command in T _E X or L ^a T _E X	Equivalent Persian Command
	\leaders	\نشانگر
`	\leavevmode	\ت <i>رک</i> و
'	\left	\چپ
`	\leftmargin	\حاشيه چپ
'	\leftmargini	\حاشيه چ <u>ٰ</u> ټيک
`	\leftmarginii	\حاشيه چ <u>ټ</u> دو
`	\leftmarginiii	\حاشيه چ <u>َ</u> ٺسه
`	\leftmarginiv	\حاشيه چپ چهار
`	\leftmarginv	\حاشيه چـپ بنج
'	\leftmarginvi	\حاشيه چُپْشش
`	\leftmark	\علامت چپ
`	\leftpageskip	\كادرتاچ ^{ي.}
`	\leftskip	\فاصله اُبتدای سطر
`	\let	\بگذار
'	\line	\سطر
'	\linebreak	∖سـ <i>طرش</i> ـک <i>ن</i>
`	\linepenalty	\جريمهسطر
`	\lineskip	\فاصله سطرها
'	\lineskiplimit	\حدفاصلهسطر
`	\linespread	\كششفاصلەسط <i>ر</i>
'	\linethickness	∖ضخامتخط
'	\linewidth	\پهنا <i>ی</i> سطر
'	\listfigurename	\عنوان فهرست اشكال
'	\listfiles	\ليسـتـپروندهها
'	\listoffigures	\فهرست اشكال
'	\listoftables	∖فهرستجداول
`	\listparindent	\تورفتگ <i>ى</i> بندلیست
'	\listtablename	\عنوان فهرست جداول
	\LoadClass	\با <i>ركن</i> طبقه
'	\LoadClassWithOptions	\بار <i>كن</i> طبقەباگزينە
'	\location	\مكان
'	\long	\بلند
`	\loop	\حلقه
'	\looseness	\گسيخت <i>گى</i>
'	\lower	\انتقالِبپایین
'	\@makeother	∖@دیگر
'	\@m	∖@زار
'	\@M	\ده@زار
'	\@Mi	\ده@زاری <i>ک</i>
'	\@Mii	\دە@زاردو
'	\@Miii	\دە@زارسە
'	\@Miv	\ده@زارچهار
	\@MM	\بيس_@زار
'	\m@ne	\من@ا
	\mag	\بِزِرگنمایی
	\magstep	\گام
		Continued on next page



Command in TEX or LATEX Equivalent Persian Command \magstephalf \نيم گام \مطلب اصلی \mainmatter ∖اتحرف \makeatletter \makeatother ∖اتدیگر \makebox \کادربیخط \makeglossary \ساختفرهنگ \makeindex \تهيهنمايه \ساختبرچسب \makelabel \makelabels \ساختبرچسبها \ساختحروفكوچک \MakeLowercase \عنوان ساز \maketitle \ساختحروفبزرگ \MakeUppercase \درحاشيه \marginpar ∖فاصلهدوحاشیه \marginparpush \فاصله تاحاشیه \marginparsep \marginparwidth \یهنایحاشیه \علامت \mark \علامت دردوطرف \markboth \علامت
درراست \markright \mathaccent \اعرابرياضي \mathchar \نويسهريا*ضي* \تعریف نویسه ریاضی \mathchardef \كدرياض*ي* \mathcode \رياض*ي*رومن \mathrm \حداكثرتكرار \maxdeadcycles \maxdepth \حداكثرعمقصفحه \maxdimen \بعدبيشين `کادربی \mbox \شمايلناز*ک* \mdseries ∖معنا \meaning \mediumseries \ناز*ک* \فاصلهمتوسطرياضي \medmuskip \يرشمتوسط \medskip \medskipamount ∖مقداريرشمتوسط \medspace \فضاىمتوسط \message \پيام \ييام شكن **\MessageBreak** \حداٰقل فاصله رديف \minrowclearance \mkern \دور*ی*ریاضی \month \ماه \انتقالبچي \moveleft \انتقالبراست \moveright ∖فاصلەرياضى \mskip \m@th \ر*ى*@ضى \multicolumn

\multiply

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∖ضرب

Command in TEX or LATEX Equivalent Persian Command \multispan \چندادغام ∖ميوفاصله \muskip \تعريفميوفاصله \muskipdef ∖@ترنام \@namedef \@nameuse √@کاربردنام \@ne \یک@ \نام \name \natural \باریک \nearrow \nearrower ∖باریکتر \شكلبند*ى*موردنيار \NeedsTeXFormat ∖منفی \neg ∖فضایمتوسطمنفی \negmedspace \negthickspace \فضاى ضخيم منفى \negthinspace \دور*ی*کوچکمنفی \newboolean ∖بولىنو \كادرجديد \newbox \فرماننو \newcommand \شمارجديد \newcount \newcounter \شمارندهجدید \newdimen \بعدجديد \newenvironment ∖محيطنو \خانوادهجديد \newfam ∖قلم،نو \newfont \كم*>* جديد \newhelp \newif ∖گرجدید \newinsert \درججديد \newlabel \برچسبجديد \newlength \تعريف بعد جديد \newline ∖سطرجدید \newlinechar ∖نوىسەسطرحدىد \ميوفاصله *ج*ديد \newmuskip \صفحهجديد \newpage \newread \بخوان جديد \تعریف کادرجدید \newsavebox \newskip \فاصلهجديد \newtheorem \قضيهجديد \newtoks \جزءجديد \newwrite \بنویس جدید \noalign \ب*ى*رديف ∖نشکن \nobreak ∖فاصلەنشكستنى \nobreakspace \nocite \بدونسند

\noexpand \nofiles

\noindent

\بدون تورفتگی Continued on next page



\نگستر

\بدونيرونده

Command in TEX or LATEX	
\nointerlineskip	\ب <i>ى</i> فاصلەسطر
\nolimits	\بدونحد
\n	\سطرنشكن
\nonstopmode	\پردازشبدون توقف
\n	\فُواصل متعارف لاتين
\nonumber	\بدون شـماره
\nopagebreak	\صفحەنشك <i>ن</i>
\normalbaselines	∖کرسیهایمتعارف
\normalbaselineskip	∖فاصله کرسی متعارف
\normalcolor	\رن <i>گ</i> عاد <i>ی</i>
\normalfont	\قلمعادى
\normallineskip	∖فاصله سطرمتعارف
\normallineskiplimit	\حدفاصله سطرمتعارف
\normalmarginpar	\درحاشیهعادی
\normalsize	\اندازهعاد <i>ی</i>
\notag	∖بدون تیکت
\null	∖نول
\nullfont	\قلم تھ <i>ي</i>
\number	\عدد
\numberline	\سطرعد <i>دی</i>
\numberwithin	\شـمارەمطابق
\@evenfoot	\پایی <i>ن</i> صفحەزوج
\@evenhead	\بالا <i>ى</i> صفحەزوج
\@oddfoot	\پایی <i>ن</i> صفحه <i>فرد</i>
\@oddhead	\بالا <i>ى</i> صفحەفرد
\@outeqntrue	\شمارەبيروندرست
\@outeqnfalse	\شمارەبيروننادرست
\obeylines	\سطربهسطر
\obeyspaces	\فضافعال
\oddsidemargin	∖حاشیه فرد
\offinterlineskip	\سطورب <i>ى</i> فاصله
\omit	\حذف
\@onlypreamble	$ackslash$ تنهادرپی \hat{w} درآمد
\onecolumn	\یکستون
\onlynotes	\تنهایادداشتها
\onlyslides	\تنهااسـلايدها
\openin	\باز <i>کن</i> ورود <i>ی</i>
\openout	\باز <i>کن خر</i> وج <i>ی</i>
\OptionNotUsed	∖گزینهمصرفنشده
\or	\يا
\outer	\ب <i>ر</i> ون <i>ی</i>
\output	∖صفحەبندى
\outputpenalty	\جريمەصفحەبن <i>دى</i>
\overfullrule	\علامتسرريز
\@preamblecmds	\@فرمان هاُی پیش در آمد
\p@	\@پو



Command in TEX or LATEX	Equivalent Persian Command
\PackageError	\خطا <i>ی</i> سبک
\PackageInfo	\اطلاعسبک
\PackageWarning	\هشدّارسبک
\PackageWarningNoLine	\هشدارٌسبکبیسطر
\pagebreak	۰
\pagecolor	\رن <i>گ</i> صفحه
\pagedepth	\عُمق صفحه
\pagefillstretch	۰ کششپرررصفحه
\pagefillstretch	۰ <i>۰ کشش</i> پررصفحه
\pagefilstretch	۰ حسسپررصفحه ∖کششپرصفحه
\pagegoal	∖ عس <i>سپرطنت</i> \غایتصفحه
	\عایت هعت \نام صفحه
\pagename	۱۳۰۲ صفحه ∖شماره گذاری صفحه
\pagenumbering	
\pageref	\رجوعصفحه \ضخامتخطصفحه
\pagerulewidth	
\pageshrink	\فشردگ <i>ى</i> صفحه ```
\pagestretch	∖کششصفحه
\pagestyle	\سبک صفحه
\pagetotal	\جمع صفحه
\paperheight	\بلندا <i>ي</i> کاغذ
\paperwidth	\پهنا <i>ی</i> کاغذ
\par	\بند
\paragraph	\پاراِ گراف
\parallel	\مواري
\parbox	\کادرپار
\parfillskip	\فاصله تهبند
\parindent	\تورفت <i>گى</i> سـربند
\parsep	\فاصلەبندليست
\parshape	\شك <i>ل</i> بند
\parskip	\فاصلەبند
\part	∖بخش
\partname	\عنوانبخش
\partopsep	\فاصلەبالا <i>ى</i> لىستبند
\PassOptionToClass	∖ارسال گزینهبه کلاس
\PassOptionToPackage	\ارسـال <i>گ</i> رينەبەيكىج
\path	\مسير
\patterns	\الگوها
\pausing	\مكثُ
\penalty	∖جریمه
\phantom	\غيب
\poptabs	` حیب ∖الگویقبلی
\postdisplaypenalty	\\نورى دېي \جريمه پس نمايش
\predisplaydirection	\ جریمەپسعمایس \جهتپیشنمایش
\predisplayenalty	\ جهتپیش ^ب مایش \جریمهپیشنمایش
	\ جريمه پيس نمايش \اندازه پيش نمايش
\predisplaysize \pretolerance	
Abrecorerance	\پیشحدبدنمای <i>ی</i>



Command in TEX or LATEX	Equivalent Persian Command
\prevdepth	\عمققبلى
\prevgraf	\بندقبلی
\printindex	\نمايهدراينجا
\ProcessOptions	\پردازش <i>گ</i> زینهها
\protect	\تَامين <i>ُ</i>
\providecommand	∖تهیه فرمان
\ProvidesClass	\آمادەسار <i>ى</i> طبقە
\ProvidesFile	\آمادەسازٰیۗپروندە
\ProvidesPackage	\آمادەسازٰی سُبک
\pushtabs	\ثبتالگو ً .
	`کواد `کواد
\qquad	`\كوُّكواد
\@outputpagerestore	ۘ\@ُبازُ آیی خروج صفحه
\radical	\رادیکال \رادیکال
\raggedbottom	` \پایینبی تنظیم
\raggedleft	۰ پـــی . د ۱ تنظیم ازراست
\raggedright	\ \تنظیم ازچپ
\raise	`\انتقالْ بِبَالَا
\raisebox	` \بالابر
\raisetag	` بَـرَبُر \تُرفيع اتيكت
\rangle	` حرحیق عیات \زاویه ر
\rceil	\روي \سقفر
\read	\ بخوان \بخوان
\ref	\ بــــــــــــــــــــــــــــــــــــ
\reflectbox	`ربری \کادرقرینه
\refname	` \عنوان مراجع
\refstepcounter	` \گام شمارندهمرجع
\relax	`
\removelastskip	` \رُفع آخرین فاصله
\renewcommand	` فُرمان ازنو
\renewenvironment	\محيط ازنو
\repeat	`\ازنو
\RequirePackage	ۘ سُبِکُ موردنیاز
\RequirePackageWithOptions	\سب <i>ک</i> موردنیازباگزینه
\resizebox	\کادرکشیده \کادرکشیده
\reversemarginpar	\درحاًشيةمعكو <i>س</i>
\rfloor	`\كفُر
\right	`\راست
\rightmargin	\حًاشيەراست
\rightmark	\علامت راست
\rightpageskip	`\كادرتاراست
\rightskip	\فاصلَه اُنتهای سطر
\rmdefault	` \رومنعادی
\rmfamily	` \فامی <i>ل</i> رومن
\Roman	۰ \رومنبزر <i>گ</i>
\roman	\رومن کوچک
	<u> </u>



Command in TEX or LATEX Equivalent Persian Command <u>\عددر</u>ومي \romannumeral \rotatebox ∖کادرچرخان \رنگردیف \rowcolor ∖خط \rule \@secondoftwo \@دوم*ی*ازدو \@spaces ∖@فضاها \samepage \همينصفحه\ ∖مقدارکادر \savebox ∖مقكادر \sbox \كادراند ازه \scalebox \پیشفرض تمام بزرگ \scdefault ` \شکل تمامبزرگ \scshape \قلم توان \scriptfont \قلم توان توان \scriptscriptfont \scriptscriptstyle ∖سبک ته نوشت ته نوشت \اندازهپانویس \scriptsize \سبک ته نوشت \scripstyle \یردازش گذری \scrollmode \section \secdef \تعريفقسمت \see \ببينيد \seealso \نيزببينيد \seename \نام,ببينيد \selectfont ∖قلمبردار \تنظيم₎بولى \setboolean \درکآدر \مقدارشمارنده \setbox \setcounter \مقداركليدها \setkeys \setlength \مقداربعد \تنظيم منها \setminus \تعريف قلم علائم \SetSymbolFont \تنظيم به عمق \settodepth \تنظيم به ارتفاع \settoheight \مقدار بعد به اندازه \settowidth \كدضريبفاصله \sfcode \sfdefault \پيشفرضسف \sffamily \فاميلسنسريف √كادرسايهدار \shadowbox \sharp ∖تیز \shipout \بفرست \یشته کو تاه \shortstack \نمایشبده \show \نمایشبده کادر \showbox \میزان نمایش کادر \showboxbreadth

\showboxdepth

\showlists

Continued on next page

\عمقنمایش کادر

\نمایشبده لیستها



Command in TEX or LATEX Equivalent Persian Command \showthe \نمایشبده محتوای \حالت ساده قلم \simplefontmode \sixt@@n \شانز*د*@ \skewchar \نويسه *اريب* \skip ∖فاصله \skip@ \فاصل@ \skipdef \تعريف فاصله ∖خواىىدە \sl \sldefault \پيشفرضخو [.]شكلخوابيده \slshape \راحتچين \sloppy \slshape \کوچک \small \پرش *كو*تاه \smallskip \smallskipamount \مقدار پرش کو تاه \smash ∖لىخند \smile \كدمكان همانطور \snglfntlocatecode ∖فضا \space ∖ضریبفاصله \spacefactor \spaceskip \فاصله كلمات \spadesuit \ییک \ادغام \span \special ∖ویژه \حداكثرعمقستون \splitmaxdepth \splittopskip \فاصلهبالا*ي*ستون \star ∖ستاره \stepcounter \گام شمارنده ∖کشی \stretch \string \رشته \strut ∖شمع \strutbox ∖كادرشمع \subitem ∖زیربند \زيرپاراگراف \subparagraph \زيرقسم*ت* \subsection ∖زیرپشته \substack \subsubitem \زيرزيربند \subsubsection \subset \زيرمجموعه \subseteq \زيرمجموعهمس \منتها*ى* صفحه \supereject \حذف مكان شناور \suppressfloats \@موقتآ \@tempa \@موقتب \@tempb

\@tempc

\@tempd

Continued on next page



\@موقتپ

∖@موقت تُ

Command in TEX or LATEX Equivalent Persian Command \@tempe ∖@موقتث \@كادرقت آ \@tempboxa \@شماقت آ \@tempcnta \@tempcntb ∖@شماقتب \@tempdima ∖@بعدقتآ \@tempdimb √@بعدقتب \@tempdimc ∖@بعدقت ي \@فاقت آ \@tempskipa \@tempskipb ∖@فاقتب \@سواقت آنادرست \@tempswafalse \@سواقت آدرست \@tempswatrue \@جزقتآ \@temptokena \انگزیرنویس \@thefnmark \@thirdofthree \@سوم*ى*ازسه \فاصله جاگذاری \tabbingsep \tabcolsep \فاصلەبينستونها \فهرستمطالب \tableofcontents \عنوان جدول \tablename \فاصله ستونها \tabskip \tabularnewline \تهسطرجدول ∖اتىكت \tag ∖تلفن \telephone ∖تک \TeX \text \مت*ن* \گلولەمت*نى* \textbullet \textfont ∖قلممتن \ام دش متني \textemdash \textendash \ان *د*ش متنى \textexclamdown \تعجبوارونهمتني \textperiodcentered \نقطهوسطمتني \textquestiondown \سوال وارونه متني \نقل چپمتنی دولا \textquotedblleft \نقل راست متنى دولا \textquotedblright \نق*ل*متن*ى چپ* \textquoteleft \textquoteright \نقلمت*نی*راست \textvisiblespace \فضاى نمايان متنى \textbackslash \شكافتيشتمتني \ميلەمتنى \textbar \بزر*گ* ترمتنی \textgreater \کمترمتنی \textless \textbf \متنسياه\ \textcircled \مدورمت*ني* \رنگمتن \textcolor \نشان كلمه مركب متن \textcompwordmark \فاصلهمتن وشناور \textfloatsep

\textfraction

Continued on next page



\نسبتمتن

Command in TEX or LATEX Equivalent Persian Command \textheight \بلندا*ى*متن \textindent \مت*ن* تورفته \مت*ن*|يتاليک \textit \textmd \متن ناز*ک* \textnormal \مت*ن*نرمال \textregistered \ثبتيمتني \textrm **متن**رومن \متن تمام بزرگ \textsc \textsf \متن *سن سر*يف \متنخوابيده \textsl \سبکمتنی \textstyle \textsuperscript \بالانويسمت*ني* \علامت تجارى متنى \texttrademark \مت*ن* تايپ \texttt \textup \متن ایستاده \textwidth \يهنا*ى*متن \thanks \زيرنويسعنوا*ن* \the \محتوا*ي* \thempfn \اینزیرنویس \خطهاضخيم \thicklines \thickmuskip \فاصلەزيادرياضى \فاصله كم رياضي \thinmuskip \فضاضخيم \thickspace \خطهانازک \thinlines *c*ور*ى ک*وچک \thinspace \این صفحه تجملی \thisfancypage \سبکاین صفحه \thispagestyle \thr@@ \سە@ \tilde ١مد \tiny ∖ظریف \time ∖زمان \times ∖ضربدر \title ∖عنوان \به \to ∖امروز \today \toks ∖جزء \toksdef \تعريف جزء \tolerance \حدبدنمایی \top עטע\ \حطبالاى شناور \topfigrule \نسبتبالا \topfraction \حاشيهبالا \topmargin \علامت بالا \topmark **كادرتابالا** \toppageskip \فاصلەبالاىلىست \topsep \topskip ∖فاصلەبالا



Command in TEX or LATEX	
\totalheight	\بلندا <i>ی کل</i>
\tracingall	\ردگی <i>ر ی</i> کل
\tracingcommands	\ر <i>دگیری</i> فرامین
\tracinglostchars	\ردگی <i>ری</i> حروف
\tracingmacros	\ردگی <i>ری</i> ماکروها
\tracingonline	\ردگی <i>ری</i> نمایش <i>ی</i>
\tracingoutput	\ر <i>دگیری</i> صفحهبند <i>ی</i>
\tracingpages	\ردگی <i>ری</i> صفحات
\tracingparagraphs	\ر <i>دگیری</i> بندها
\tracingrestores	\ردگیر یبازگردانی
\tracingstats	\ردگی <i>ری</i> آمارها
\triangle	\مُثلث
\ttdefault	\پیش فرض تایپ
\ttfamily	\فَاميل تأيب ۚ ``
\tw@	\دو@
\twocolumn	\دوستون
\typein	\درنویس <i>ُ</i>
\typeout	\برنُويْسَ
\uccode	\کُدْبِزْرگ
\uchyph	\تيرهبندىبزر <i>گ</i>
\undefined	\تعريفنشده
\underline	\زيرُخط
\unhbox	\بیککادرا
\unhcopy	\بی ک <i>ی</i> ا
\unitlength	\واحدطول
\unkern	\برگشت دوری
\unpenalty	\برگشتجريمه
\unskip	\برگشتفاصًله
\unvbox	\ب <i>ى</i> كادرو
\unvcopy	\ب <i>ى</i> ك <i>چى</i> و
\updefault	\پیش فرض ایستاده
\upshape	`ش <i>کل</i> ایستاده
\usebox	\ازکادر
\usecounter	∖باشـمارشگر
\usefont	\ <i>گز</i> ينشِقلم
\usepackage	\سبکلازم ُ
\@vobeyspaces	∖@فضاهایٌفعال
\@void	\@تھ <i>ى</i>
\vadjust	\تنظيم و
\valign	\رديفُو
\value	\مُحْتُوا <i>ی</i> شمارنده
\vbadness	\بدنماییو
\vbox	\كادرو
\vcenter	\كادرُوَسط
\verb	\همانَطُور
\vfil	\پرو
	0 1 1



Command in TEX or LATEX	Equivalent Persian Command
\vfill	
\vfilneg	\رُفع پرو
\vfuzz	\پرزغمودی
\visible	\نُمايان
\vline	\خطعمود
\voffset	∖حاشیهو
\voidb@x	∖ <i>ک</i> @درتھ <i>ی</i>
\vpageref	∖ارجاعصفحهع
\vrboxsep	∖فاصله وگرد
\vref	∖ارجاعع
\vrule	√خطو
\vsize	\طولصفحه
\vskip	∖فاصلەو
\vspace	\فضا <i>ي</i> و
\vsplit	∖شکستو
\vss	\هردوو
\vtop	\کادرگود
\wd	\عرض
\whiledo	\مادامبك <i>ن</i>
\widehat	\كلاەپھ <i>ن</i>
\widetilde	\مدپهن
\widowpenalty	\جریمه تهبند
\width	\پهنا
\wlog	\درکارنامه
\write	\بنویس
\@xobeysp	\@فضا <i>ى</i> لاتي <i>ن</i>
\@xxxii	\سى@دو
\xdef	∖ترگع
\xleaders	\نشٰاؖنگ <i>رگس</i> ترش <i>ی</i>
\xspaceskip	\فاصله اضاف <i>ی</i> کلمات
\year	∖سال
\z@	\@فر
\z@skip	\@فرفاصله

Table 2: The Equivalent XePersian Commands

Command in XePersian	Equivalent Persian Command
\autofootnoterule	े خطزیرنویسخودکار
$\Lambda $	∖اعدادفرمولهاخودكار
\DefaultMathDigits	∖اعدادفرمولهالاتين
\deflatinfont	∖تعریفقلم\لاتین
\defpersianfont	\تعریفقلم _ا پارس <i>ی</i>
\hboxL	\کادراچپ ٔ
\hboxR	\كادراست



Command in XePersian	Equivalent Persian Command
\keyval@eq@alias@key	∖معادل@کلید
Latincite	\مرجع لاتين
latinfont	\قلم\لاتين
\latintoday	\امروزلاتين
leftfootnoterule	\خطزِيرنويس <i>چپ</i>
lr	\مت <i>ن</i> لاتي <i>ن</i>
LRE	\چپبراست
LTRdblcol	\دوستون <i>ی</i> چپ
LTRfootnote	\پانویس
LTRfootnotetext	\متنپانویس
\LTRthanks	\پانوی <i>س</i> عنوان
\persianday	\روزپارس <i>ی</i>
persianfont	\قلم،پارسى
\PersianMathDigits	\اعدادفرمولهاپارسی
persianmonth	\ماەپارس <i>ى</i>
\persianyear	\سالۗپارسى
\plq	\علامت چپ نقل قول پارس <i>ی</i>
\prq	\علامتراستنقلقولپارسی
rightfootnoterule	خطزیرنویس $_{ackslash}$ خطزیرنویس
\rl	\متنپارسی
\RLE	\راستبچپ
\RTLdblcol	\دوستون <i>ی</i> راست
RTLfootnote	∖پانوشت
\RTLfootnotetext	\متنپانوشت
RTLthanks	\پانوشتعنوان
@SepMark	∖@علامتبین
SepMark	\عِلامتبين
setdefaultbibitems	\بگذارمرجوعاتعادی
setdefaultmarginpar	\بگذاردرحاشیهعاد <i>ی</i>
setmathdigitfont	\گزينشقلم _ا عدادفرمولها
setfootnoteLR	\بگذارزیرنو [َ] یس <i>چپ</i>
setfootnoteRL	\بگذارزیرنویسراست
setlatintextfont	\ <i>گز</i> ينش قلم لاتين متن
\setLTR	\بگذارمتن چُپ
\setLTRbibitems	\بگذارمرجوعات چپ
\setLTRmarginpar	\بگذار <i>د</i> رحاشیه چپ
\setRTL	\بگذارمتن راست
\setRTLbibitems	\بگذارمرجوعاتراست
\setRTLmarginpar	\بُگذارُدرُحاشیهراست
\settextfont	\ <i>گُ</i> زينشُ ٰقلم متَن ٰ
textwidthfootnoterule	\خطُّ زيرنويس پهنا <i>ي</i> متن
twocolumnstableofcontents	\فهرست مطالب دوستوني
unsetfootnoteRL	\نڴٚۮؘؙٳڔڒۑڔڹۅۑڛۘڔٳڛؗٮ
\unsetLTR	\نگذارمتن چپ
\unsetRTL	\نگذارُمتن راّست
\vboxL	`\كادروًازچَّپُ
	Continued on next page



Command in XePersian	Equivalent Persian Command
\vboxR	∖کادروازراست
\XeLaTeX	\ز <i>ى</i> لات <i>ک</i>
\XePersian	\ز <i>ى</i> پرشين
\xepersianversion	\گونهٔ زیپرشین
\xepersiandate	\تاریخ گونه زی پرشین
\XeTeX	\ز <i>ى</i> تک

Table 3: The Equivalent LaTeX Environments

abstract appendix array center description displaymath document enumerate figure figure* filecontents filecontents filecontents filecontents figure filecontents filecontents filecontents filecontents filecontents figure filecontents filecontents filecontents filecontents	Environment in LaTeX	Equivalent Persian Environment
array مأرأيه center وسط چين description توضيح displaymath رياضی نمايشی document نوشتار enumerate شمارش figure ** figure* ** filecontents محتوای پرونده* filecontents* **	abstract	چکیده
centeremd چینdescriptionred countdisplaymathcub countdocumentcub countenumeratecub countfigurecub countfigure*mod countfilecontentscountfilecontents*count	appendix	پیوست
description reduction displaymath document document enumerate figure figure* filecontents filecontents filecontents filecontents filecontents filecontents filecontents filecontents filecontents reduction filecontents filecontents filecontents reduction filecontents filecontents filecontents reduction filecontents filecontents filecontents filecontents filecontents reduction filecontents file	array	آرایه
displaymath ریاضی نمایشی document نوشتار enumerate شمارش figure شکل figure* filecontents filecontents filecontents محتوای پرونده*	center	وسط چین
document نوشتار enumerate شمارش figure شكل figure* * خاتواى پرونده filecontents محتواى پرونده* filecontents* **	description	توضيح
enumerate شمارش شمارش شکل شکل figure شکل* figure* شکل* filecontents محتوای پرونده filecontents*	${ t displaymath}$	ریاض <i>ی</i> نمایش <i>ی</i>
شكلُ شكلُ figure* ** filecontents محتوای پرونده* filecontents* ** محتوای پرونده	document	نوشتار
محتوّای پرونده * filecontents محتوای پرونده * filecontents	enumerate	
محتوّای پرونده * filecontents محتوای پرونده * filecontents	figure	شکل
محتوایپرونده* *filecontents	figure*	
محتوایپرونده* *filecontents	filecontents	محتوا <i>ی</i> پرونده
	filecontents*	محتوایپرونده*
چپچین flushleft	flushleft	چپچین
راست چین flushright	flushright	
itemize فقرات	itemize	
المه letter	letter	نامه
لیست list	list	ليست
جدول دراز longtable	longtable	جدول دراز
الادررچ lrbox	lrbox	کادررچ
ریاضی math	math	
ماتریس matrix	matrix	
صفحه کو چک minipage	minipage	
چندستونیها multicols	multicols	
چندخطی multline	multline	_ v
یادداشت یادداشت	note	
overlay انباشتن	overlay	
تصویر picture	picture	
اقتباس quotation	quotation	<u> </u>
quote duote	quote	
slide اسلاید		
پارنامرتب sloppypar		
شكافتن split		
زیرِ آرایه subarray		
جاگذاری tabbing	tabbing	



Environment in LaTeX	Equivalent Persian Environment
table	لوح
table*	لوح*
tabular	جدول
tabular*	جدول*
thebibliography	مراجع
theindex	محتوا <i>ی</i> نمایه
titlepage	صفحهعنوان
trivlist	لیستبدوی
verbatim	همانطوركههست
verbatim*	همانطورکه هست*
verse	شعر

Table 4: The Equivalent XePersian Environments

Environment in XePersian	Equivalent Persian Environment
latin	لاتین
LTR	متن چپ
LTRitems	دستەبن <i>دىچپ</i>
persian	پارس <i>ی</i>
RTL	متنراست
RTLitems	دستەبند <i>ى</i> 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	j
С	9
C	س
h	1
Н	ĩ
J	ت
1	چ ف
L	ف
m	م
p	پ ص
p	ص
r)
R	I
S	ک
t	ب م



Position argument in LaTeX Equivalent Persian position argument

There are two ps in Table 5, first p and its Persian equivalent ψ stand for paragraph (used in tabular and similar environments) and the second p and its Persian equivalent ϕ 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	پیشنویس
origin	مبدا
clip	ب <i>ی</i> اضافه
keepaspectratio	حفظ تناسب
natwidth	پهنا <i>ی</i> طبیعی
natheight	بلندای طبیعی
bb	مختصات
viewport	محدودهنمايش
trim	حذفاطراف
angle	زاویه
width	يهنا
height	بلندا
totalheight	بلندا <i>ی کل</i>
scale	ضریب
type	نوع
ext	پسوند
read	خواندني
command	فرمان
X	طول
у	عرض
units	واحد

Table 7: Persian Equivalent key values of graphicx package

Original Key value	Equivalent Persian Key value
b	
В	ک
false	نادرست
1	چ
r)
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.



Original font feature	Equivalent Persian font feature
ExternalLocation	مکان خار <i>جی</i>
ExternalLocation	مسير
Renderer	تحوی <i>ل</i> دهنده
BoldFont	قلم،سیاه
Language	زبان
Script	خط
UprightFont	قلم عمود <i>ی</i>
ItalicFont	قلم ایتالیک
BoldItalicFont	قلم ایتالیک سیاه
SlantedFont	قلم خوابيده
BoldSlantedFont	قلم خوابيده سياه
SmallCapsFont	قلم کلاه کوچک
UprightFeatures	ویژگیهای فلم عمودی
BoldFeatures	ۅؙؿڗؙؚڲؽۿٳؽؖڡٙڶؠؗڛۑٲ؋
ItalicFeatures	وِّیژُگی های قلم ایتالیک
BoldItalicFeatures	وِّیژُگی های قلم ایتالیک سیاه
SlantedFeatures	ۅؗؿڗ <i>ؙڰؽ</i> ۿٵؽؖۊڶؠؗ؋ؗڿۅٲڹؽۮ؋
BoldSlantedFeatures	وَيژُگیهای قلم خوابیدهسیاه
SmallCapsFeatures	ۅؙۜؾڗؙڰ <i>ؽ</i> ۿٵؽؖۊڶؠؗ؇ڬڶٲ؋ڬۅڿػ
SizeFeatures	وَیژ <i>ٔ گی</i> های اندازه
Scale	ئىدىت ضريب
WordSpace	فضاًی کلمه
PunctuationSpace	فضای نقطه گذاری
FontAdjustment	تنظيم قلم
LetterSpace	فضأى حرف
HyphenChar	نویسهٔ تیره
Color	رنگ
Opacity	کُدری
Mapping	نگاشت
Weight	سنگین <i>ی</i>
Width	یهنا
OpticalSize	پ ، اندازه چشم <i>ی</i>
FakeSlant	خوابيدة تقلبي
FakeStretch	۔ کشُش تقلبی
FakeBold	بى سىاەتقلى <i>ي</i>
AutoFakeSlant	۔ خوابیدہ تقلب <i>ی</i> خودکار
AutoFakeBold	سیاه تقلبی خود کار
Ligatures	 دویاچندحرفمتصلبههم
Alternate	متناوب
Variant	ىسەرب گوناگون
Variant Variant	مجموعەسبكى
Variant CharacterVariant	مجموعه سبحی گوناگونی نویسه
Style	
Style Annotation	سبک یادداشت
RawFeature	یادداست ویژگ <i>ی</i> ها <i>ی</i> کال
nawr eature	Continued on next page



Original font feature	Equivalent Persian font feature
CharacterWidth	پهنا <i>ی</i> نویسه
Numbers	أرقام
Contextuals	متنى
Diacritics	تفکیک کنندهها
Letters	حروف
Kerning	دوری
VerticalPosition	موق ع یتعمودی
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	لاتين
Style	MathScript	اسکریپتریاضی
Style	MathScriptScript	اسکریپت اسکریپت ریاضی

2.5 A Sample Input T_EX File

2.6 Font Commands



2.6.1 Basic Font Commands

```
\label{thm:continuous} $$\operatorname{cont} [\operatorname{Options}] {\langle font name \rangle} $$ \set [\operatorname{Options}] $$ \set [\operatorname{Option
```

- 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

```
\label{lem:cs_options} $$ \defpersian font \CS [Options] {$\langle font \ name \rangle$} $$ $$ \deflatin font \CS [Options] {$\langle font \ name \rangle$} $$
```

With \defpersianfont, you can define extra Persian fonts.

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

In this example, we define \Nastaliq to stand for 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] \{\langle font \ name \rangle\}
\persiansffamily \textpersiansf\{\langle text \rangle\}
```

2.6.4 Choosing Persian Mono Font

```
\setpersianmonofont [Options] \{\langle font \ name \rangle\}
\persianttfamily \textpersiantt\{\langle text \rangle\}
```

2.6.5 Choosing Persian Iranic Font

```
\setiranicfont [Options] \{\langle font \ name \rangle\}
\iranicfamily \textiranic\{\langle text \rangle\}
```

2.6.6 Choosing Persian Navar Font

```
\setnavarfont [Options] \{\langle font \ name \rangle\}
                         \text{\text{}} \text{\} \{\langle text \rangle\}
\navarfamily
```

2.6.7 Choosing Persian Pook Font

```
\setpookfont [Options] \{\langle font \ name \rangle\}
\pookfamily \textpook\{\langle text \rangle\}
```

2.6.8 Choosing Persian Sayeh Font

```
\setsayehfont [Options] \{\langle font \, name \rangle\}
\sayehfamily \textsayeh\{\langle text \rangle\}
```

2.6.9 Choosing Latin Sans Font

```
\setlatinsansfont [Options] \{\langle font \ name \rangle\}
\sffamily \textsf\{\langle text \rangle\}
```

2.6.10 Choosing Latin Mono Font

```
\setlatinmonofont [Options] \{\langle font \ name \rangle\}
\ttfamily \textt\{\langle text \rangle\}
```

Latin and Persian Environment

```
\begin{latin}
                       \langle text \rangle
                                \end{latin}
\begin{persian}
                                   \end{persian}
                          \langle text \rangle
```

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



latin environment both changes direction of the paragraphs to LTR and font to

latinitems and parsiitems environments

```
\begin{latinitems}
 \forall text
\end{latinitems}
```

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

```
\begin{parsiitems}
  \forall tem \langle text \rangle
  ...
\end{parsiitems}
```

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

Short Latin and Persian Texts

- With \lr command, you can typeset short LTR texts.
- With \rl command, you can typeset short RTL texts.

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.



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.

Additional Counters 3.5

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:

```
\begin{array}{c} \begin{array}{c} \\ \\ \end{array} \end{array}
                                   \tartibinumeral{\langle integer \rangle}
```

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

Things To Know About \setmathdigitfont, \setmathsfdigitfont, 3.6 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 TFX 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 TFX'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.

New Conditionals

Shell escape (or write 18) conditional

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

Bilingual Captions 5

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.

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 TpX expressions, however the tokens A, a, I, i, 1, ا, ن, ی, must be inside a {} group if they are not to be taken

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

Index Generation

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



Converting Your FarsiT_EX Files To XePersian or Unicode

There is a python program written by Mostafa Vahedi that enables you to convert FarsiTFX files to XePersian or unicode. This program can be found in doc folder with the name ftxe-0.12.py. To convert your FarsiTpX files to XePersian, put ftxe-0.12.py in the same directory that your FarsiTrX 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 (FarsiTFX 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.

Extra Packages And Classes 6

Magazine Typesetting

Introduction 6.1.1

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

6.1.2 Usage

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



²For 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.

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

at the beginning of your source file. The class options are described in subsubsection 6.1.12. From this point it is possible to include packages and renew class commands described in subsubsection 6.1.9.

6.1.3 Front Page

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

```
\firstimage \firstarticle
```

The first two commands you can use inside the frontpage environment are \firstimage and \firstarticle which include, respectively, the main image and the main heading in the front page. The first one takes two arguments $\langle image \rangle$ and $\langle description \rangle$. Notice that second argument is optional and it declares the image caption; (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.

```
\scine{title}{\langle title\rangle}{\langle subtitle\rangle}{\langle opening\rangle}{\langle pages of\rangle}{\langle time\rangle}
```

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

```
\thirdarticle
```

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

```
\time_{\langle title \rangle} {\langle subtitle \rangle} {\langle opening \rangle} {\langle pages of \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 (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{\langle image\rangle}{\langle day-name\rangle}{\langle max\rangle}{\langle min\rangle}{\langle short-des\rangle}
```

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

6.1.4 Inside

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

6.1.5 The article environment

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

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

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



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

```
\authorandplace \timestamp
```

The \authorandplace{ $\langle author \rangle$ }{ $\langle place \rangle$ } inserts the name of the editor and the place where the article happened in the way many magazines do. Another useful command is $timestamp{(time)}$ 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.

```
\ightharpoonup \{\langle image \rangle\} \{\langle description \rangle\}
```

```
\columntitle \expandedtitle
```

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

```
\columntitle{\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...
\sline 
\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{\langle section name \rangle}
```

6.1.9 Customization

xepersian-magazine includes many commands which can be used to customize its aspect, from the front page to the last page. I will list them grouped so it is easy to find them. Treat them as standard LTFX 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 xepersianmagazine default heading. To achieve this, you need to put the following command at the preamble of your document:

```
\colone{text}
\customminilogo\{\langle text \rangle\}
\custommagazinename\{\langle text \rangle\}
```

```
\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 ETpX 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.

```
\left(\left(\frac{\langle left \rangle}{\langle center \rangle}\right) \left(\left(\frac{\langle right \rangle}{\langle right \rangle}\right)\right)
\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 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.

agpaper (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 xepersianmagazine. 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.



Typesetting Multiple-choice Questions

Introduction

xepersian-multiplechoice is a package for making multiple choices questionnaires under FTFX. 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}
جواب \false \
حواب ۲ true ۲∖
جواب false ۳\
جواب false ۴\
\end{question}
\begin{correction}
جواب واقعی و علت اینکه این جواب، جواب واقعی هس<mark>ت</mark>
\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 LTFX 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. xepersianmultiplechoice 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 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.



Customising The Package 6.3

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 Opt.

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
```

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}~}
\fill false symbol {\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.

