



# The XePersian *Package*

User documentation for version 24.6

to my Master, *Ferdowsi The Great*

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

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# The XePersian *Package*

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

User documentation for [version 24.6](#)

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## Contents

<b>1</b>	<b>Introduction</b>	<b>3</b>			
1.1	Important Notes . . . . .	3			
1.2	XePersian Info On The Terminal and In The Log File . . . . .	3			
<b>2</b>	<b>Basics</b>	<b>4</b>			
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	<code>defaultlatinfontfeatures</code> Option . . . . .	5	2.6.2	Defining Extra Persian and Latin Fonts . . . . .	35
2.4.2	<code>extrafootnotefeatures</code> Option . . . . .	5	2.6.3	Choosing Persian Sans Font . . . . .	36
2.4.3	Kashida Option . . . . .	5	2.6.4	Choosing Persian Mono Font . . . . .	36
2.4.4	<code>quickindex</code> Option . . . . .	6	2.6.5	Choosing Persian Iranic Font . . . . .	36
2.4.5	<code>quickindex-variant1</code> Option . . . . .	6	2.6.6	Choosing Persian Navar Font . . . . .	36
2.4.6	<code>quickindex-variant2</code> Option . . . . .	6	2.6.7	Choosing Persian Pook Font . . . . .	36
2.4.7	<code>localise</code> Option . . . . .	6	2.6.8	Choosing Persian Sayeh Font . . . . .	36
2.4.8	Localizations of the keys and key values of <code>graph- icx</code> package . . . . .	31	2.6.9	Choosing Latin Sans Font	36
2.4.9	Localizations of font fea- tures and font feature options . . . . .	31	2.6.10	Choosing Latin Mono Font . . . . .	36
2.5	A Sample Input T <sub>E</sub> X File . . . . .	34	<b>3</b>	<b>Latin and Persian Environment</b>	<b>36</b>
2.6	Font Commands . . . . .	34	3.1	<code>latinitems</code> and <code>parsiitems</code> envi- ronments . . . . .	37
2.6.1	Basic Font Commands . . . . .	35	3.2	Short Latin and Persian Texts . . . . .	37
			3.3	Miscellaneous Commands . . . . .	37
			3.4	New Commands . . . . .	38
			3.5	Additional Counters . . . . .	38
			3.6	Things To Know About <code>\setmathdigitfont</code> , <code>\setmathsfdigitfont</code> , and <code>\setmathttdigitfont</code> . . . . .	38
			<b>4</b>	<b>New Conditionals</b>	<b>39</b>

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4.1	Shell escape (or write18) conditional . . . . .	39	6.1.8	Commands between articles . . . . .	44
<b>5</b>	<b>Bilingual Captions</b>	<b>39</b>	6.1.9	Customization . . . . .	44
5.1	Support For Various Packages .	39	6.1.10	Front Page . . . . .	44
5.1.1	Things You Should Know about Support For enumerate Package . . . . .	39	6.1.11	Inside The Magazine . .	45
5.2	Index Generation . . . . .	39	6.1.12	Class Options . . . . .	46
5.3	Converting Your FarsiT <sub>E</sub> X Files To XePersian or Unicode . . . . .	40	6.2	Typesetting Multiple-choice Questions . . . . .	47
<b>6</b>	<b>Extra Packages And Classes</b>	<b>40</b>	6.2.1	Introduction . . . . .	47
6.1	Magazine Typesetting . . . . .	40	6.2.2	Usage . . . . .	47
6.1.1	Introduction . . . . .	40	6.2.3	Loading The Package . .	47
6.1.2	Usage . . . . .	40	6.2.4	Creating Questions . . .	47
6.1.3	Front Page . . . . .	41	6.2.5	The question Environment . . . . .	47
6.1.4	Inside . . . . .	42	6.2.6	Question Numbers . . .	48
6.1.5	The article environment . . . . .	42	6.2.7	The Form and the Mask . . . . .	48
6.1.6	The editorial environment . . . . .	43	6.2.8	Typesetting corrections . . . . .	48
6.1.7	The shortarticle environment . . . . .	44	6.2.9	Important Note . . . . .	48
			6.3	Customising The Package . . . . .	49
			6.3.1	The question environment . . . . .	49
			6.3.2	The Form and the Mask . . . . .	49
			6.3.3	The correction . . . . .	49



# 1 Introduction

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

## 1.1 Important Notes

- ☞ The XePersian package only works with Xe $\TeX$  engine.
- ☞ Before reading this documentation, you should have read the documentation of the bidi package. The XePersian package automatically loads bidi package with `RTLdocument` option enabled and hence any commands that bidi package offers, is also available in XePersian package. Here, in this documentation, we will not repeat any of bidi package's commands.
- ☞ In previous versions ( $\leq 1.0.3$ ) of XePersian, a thesis class 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--2022 Vafa Khalighi
* Copyright (c) 2018--2020 bidi-tex GitHub Organization
*
* v24.6, 2022/06/27
*
* License: LaTeX Project Public License, version
* 1.3c or higher (your choice)
*
* Location on CTAN: /macros/xetex/latex/xepersian
*
* Issue tracker: https://github.com/kvafa/xepersian/issues
*
* Discussions: https://github.com/kvafa/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 T<sub>E</sub>X but lion does not symbolizes XePersian. **Simorgh**<sup>1</sup> (shown on the first page of this documentation) symbolizes XePersian.

## 2.3 Commands for Version number, and Date of The Package

`\xepersianversion   \xepersiandate`

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

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

```
1 \documentclass{article}
2 \usepackage{xepersian}
3 \settextfont{XB Niloofar}
4 \begin{document}
5 \begin{latin}
6 This is typeset by \textsf{\XePersian} package, \xepersianversion,
7 \xepersiandate.
8 \end{latin}
9 \end{document}
```

## 2.4 Options of The Package

There are few options:

### 2.4.1 defaultlatinfontfeatures Option

`defaultlatinfontfeatures=<value>`

The `defaultlatinfontfeatures` option allows you to pass font features to the main Latin font. `<value>` is a set of font features.

### 2.4.2 extrafootnotefeatures Option

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

### 2.4.3 Kashida Option

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

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

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

---

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



<code>\KashidaOn</code> <code>\KashidaOff</code>
--

☞ `\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  $\bar{t}$  is grouped under `l`) for sorting Persian alphabets.

#### 2.4.6 quickindex-variant2 Option

Same as `quickindex` Option but uses variant two (in which  $\bar{t}$  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:



<code>\eqcommand{&lt;command-name in Persian&gt;}{&lt;original L<sup>A</sup>T<sub>E</sub>X command-name&gt;}</code>
<code>\eqenvironment{&lt;environment-name in Persian&gt;}{&lt;original L<sup>A</sup>T<sub>E</sub>X environment-name&gt;}</code>

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

Command in T <sub>E</sub> X or L <sup>A</sup> T <sub>E</sub> X	Equivalent Persian Command
<code>\@arstrut</code>	\شمع جدول
<code>\above</code>	\فوق
<code>\abovedisplaysshortskip</code>	\فاصله کوتاه بالای نمایش
<code>\abovedisplayskip</code>	\فاصله بالای نمایش
<code>\abstractname</code>	\عنوان چکیده
<code>\accent</code>	\اکسنت
<code>\active</code>	\فعال
<code>\addcontentsline</code>	\بیفزاسطر فهرست
<code>\addpenalty</code>	\اضافه بر جریمه
<code>\address</code>	\نشانی
<code>\addtocontents</code>	\بیفزابه فهرست
<code>\addtocounter</code>	\اضافه بر شمارنده
<code>\addtolength</code>	\اضافه بر بعد
<code>\addvspace</code>	\بیفزافضای و
<code>\adjdemerits</code>	\تنظیم بدنمایی
<code>\advance</code>	\بیفزابر
<code>\afterassignment</code>	\بعد از انتساب
<code>\aftergroup</code>	\بعد از گروه
<code>\aleph</code>	\الف
<code>\aliasfontfeature</code>	\خصیصه مستعار قلم
<code>\aliasfontfeatureoption</code>	\انتخاب خصیصه مستعار قلم
<code>\allowbreak</code>	\شکستی
<code>\alloc@</code>	\تخصی@
<code>\allocationnumber</code>	\تخصیص یافته
<code>\allowdisplaybreaks</code>	\شکست نمایش مجاز
<code>\Alph</code>	\حروف بزرگ
<code>\alph</code>	\حروف کوچک
<code>\alsiname</code>	\نام همچنین
<code>\and</code>	\و
<code>\angle</code>	\زاویه
<code>\appendixname</code>	\عنوان پیوست
<code>\approx</code>	\تقریب
<code>\arabic</code>	\عربی
<code>\arg</code>	\آرگ
<code>\arrayrulecolor</code>	\رنگ خط جدول
<code>\arraycolsep</code>	\فاصله ستونهای آرایه
<code>\arrayrulewidth</code>	\ضخامت خط جدول
<code>\arraystretch</code>	\کشیدگی آرایه
<code>\AtBeginDocument</code>	\در آغاز نوشتار
<code>\AtEndDocument</code>	\در پایان نوشتار

*Continued on next page*





Command in T <sub>E</sub> X or L <sup>A</sup> T <sub>E</sub> X	Equivalent Persian Command
\AtEndOfClass	\درانتهای طبقه
\AtEndOfPackage	\درانتهای سبک
\author	\نویسنده
\backmatter	\مطلب پشت
\backslash	\شکاف پشت
\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 کوتاه پایین نمایش
\belowdisplayskip	\فاصله پایین نمایش
\bf	\سیاه
\bfdefault	\پیش فرض سیاه
\bfseries	\شمایل سیاه
\bgroup	\شرگروه
\bibitem	\مرجوع
\bibliography	\کتاب نامه
\bibliographystyle	\سبک کتاب نامه
\bibname	\عنوان کتاب نامه
\bigskip	\پرش بلند
\bigskipamount	\مقدار پرش بلند
\botfigrule	\خط پایین شناور
\botmark	\علامت پایین
\bottompageskip	\کادر تا پایین
\bottomfraction	\نسبت پایین
\box	\کادر
\boxmaxdepth	\حد اکثر عمق 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 از وسط
\centerline	\خط وسط
\ch@ck	\چک @ ن
\chapter	\فصل

*Continued on next page*



Command in T <sub>E</sub> X or L <sup>A</sup> T <sub>E</sub> X	Equivalent Persian Command
<code>\chaptername</code>	\عنوان فصل
<code>\char</code>	\نویسه
<code>\chardef</code>	\تعریف نویسه
<code>\CheckCommand</code>	\بررسی فرمان
<code>\cite</code>	\مرجع
<code>\ClassError</code>	\خطای طبقه
<code>\ClassInfo</code>	\اطلاع طبقه
<code>\ClassWarning</code>	\هشدار طبقه
<code>\ClassWarningNoLine</code>	\هشدار طبقه بی سطر
<code>\cleaders</code>	\نشانهگر مرکزی
<code>\cleardoublepage</code>	\دو صفحه پاک
<code>\clearpage</code>	\صفحه پاک
<code>\cline</code>	\خط ناپر
<code>\closein</code>	\ببند ورودی
<code>\closeout</code>	\ببند خروجی
<code>\closing</code>	\بستن
<code>\clubpenalty</code>	\جریمه سربند
<code>\clubsuit</code>	\خاج
<code>\colbotmark</code>	\علامت پایین ستون اول
<code>\colfirstmark</code>	\علامت اول ستون اول
<code>\color</code>	\رنگ
<code>\colorbox</code>	\کادر رنگ
<code>\coltopmark</code>	\علامت بالای ستون اول
<code>\columncolor</code>	\رنگ ستون
<code>\columnsep</code>	\بین ستون
<code>\columnwidth</code>	\پهنای ستون
<code>\columnseprule</code>	\خط بین ستون
<code>\contentsline</code>	\سطر فهرست
<code>\contentsname</code>	\عنوان فهرست مطالب
<code>\copy</code>	\کپی
<code>\copyright</code>	\حق تالیف
<code>\count</code>	\شمار
<code>\count@</code>	\شمار@
<code>\countdef</code>	\تعریف شمار
<code>\cr</code>	\سخ
<code>\crrcr</code>	\سخ سخ
<code>\csname</code>	\نام فرمان
<code>\CurrentOption</code>	\گزینه جاری
<code>\dashbox</code>	\کادر بینابین
<code>\dashv</code>	\بینابین ع
<code>\@date</code>	\@تاریخ
<code>\date</code>	\تاریخ
<code>\day</code>	\روز
<code>\dblbotfigrule</code>	\خط پایین شناور پهن
<code>\dblbottomfraction</code>	\نسبت پهن پایین
<code>\dblfigrule</code>	\خط بالای شناور پهن

*Continued on next page*



Command in T <sub>E</sub> X or L <sup>A</sup> T <sub>E</sub> X	Equivalent Persian Command
<code>\dblfloatpagefraction</code>	\نسبت صفحه شناور پهن
<code>\dblfloatsep</code>	\فاصله بین شناور پهن
<code>\dblftntlocatecode</code>	\کدامکان غیرهمانطور
<code>\dbltextfloatsep</code>	\فاصله متن و شناور پهن
<code>\dbltopfraction</code>	\نسبت پهن بالا
<code>\DeclareFixedFont</code>	\اعلان قلم ثابت
<code>\DeclareGraphicsExtensions</code>	\اعلان پسوند گرافیک
<code>\DeclareGraphicsRule</code>	\اعلان دستور گرافیک
<code>\DeclareOldFontCommand</code>	\اعلان فرمان قلم قدیمی
<code>\DeclareOption</code>	\اعلان گزینه
<code>\DeclareRobustCommand</code>	\اعلان فرمان قوی
<code>\DeclareSymbolFont</code>	\اعلان قلم علائم
<code>\deadcycles</code>	\دور بسته
<code>\def</code>	\تر
<code>\define@key</code>	\تعریف @کلید
<code>\definecolor</code>	\تعریف رنگ
<code>\deg</code>	\درجه
<code>\delcode</code>	\کد جدا ساز
<code>\delimiter</code>	\جدا ساز
<code>\delimiterfactor</code>	\ضریب جدا ساز
<code>\depth</code>	\گودی
<code>\diamondsuit</code>	\خشت
<code>\dim</code>	\ابعاد
<code>\dimen</code>	\بعد
<code>\dimen@</code>	\بعد @
<code>\dimen@i</code>	\بعد @یک
<code>\dimen@ii</code>	\بعد @دو
<code>\dimendef</code>	\تعریف بعد
<code>\discretionary</code>	\تیره گذاری
<code>\displaybreak</code>	\شکست نمایش
<code>\displayindent</code>	\تورفتگی نمایش
<code>\displaystyle</code>	\سبک نمایش
<code>\displaywidth</code>	\عرض نمایش
<code>\divide</code>	\تقسیم
<code>\documentclass</code>	\طبقه نوشتار
<code>\do</code>	\کن
<code>\dospecials</code>	\تعویض کدها
<code>\dot</code>	\نقطه
<code>\doteq</code>	\نقطه مساوی
<code>\dotfill</code>	\پر نقطه
<code>\dots</code>	\نقاط
<code>\doublebox</code>	\کادر دولا
<code>\doublerulesepcolor</code>	\رنگ فاصله دو خط جدول
<code>\doublerulesep</code>	\فاصله بین دو خط
<code>\downarrow</code>	\فلش پایین
<code>\dp</code>	\عمق

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Command in T <sub>E</sub> X or L <sup>A</sup> T <sub>E</sub> X	Equivalent Persian Command
\dump	\تخلیه
\edef	\ترگ
\egroup	\پاگروه
\eject	\انتهای فاصله
\else	\گرنه
\em	\تاکید
\emergencystretch	\کشش لاجرم
\emph	\موکد
\@empty	\@پوچ
\empty	\پوچ
\emptyset	\مجموعه پوچ
\end	\پایان
\endL	\پایان چپ
\endR	\پایان راست
\endcsname	\پایان نام فرمان
\endfirsthead	\پایان اولین سر
\endfoot	\پایان پا
\endgraf	\ته بند
\endgroup	\پایان گروه
\endhead	\پایان سر
\endinput	\پایان ورودی
\endlastfoot	\پایان آخرین پا
\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	\سطر متن 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 تیره بندی

*Continued on next page*



Command in T <sub>E</sub> X or L <sub>A</sub> T <sub>E</sub> X	Equivalent Persian Command
\expandafter	\بگستر پس از
\extracolsep	\فاصله اضافی بین ستونها
\@firstofone	\@اولی از یک
\@firstoftwo	\@اولی ازدو
\f@ur	\چ@ار
\fam	\خانواده
\fancy page	\صفحه تجملی
\fbox	\کادر با
\fboxrule	\ضخامت کادر با
\fboxsep	\حاشیه کادر با
\fcolorbox	\کادر با رنگ
\fi	\رگ
\figurename	\عنوان شکل
\filbreak	\پر شکن
\fill	\پر
\firstmark	\علامت اول
\flat	\پهن
\floatpagefraction	\نسبت صفحه شناور
\floatingpenalty	\جریمه شناور
\floatsep	\فاصله بین شناور
\flushbottom	\تنظیم از پایین
\fmtname	\شکل بندی
\fmtversion	\رده شکل بندی
\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 زیر نویس
\footnote	\زیر نویس
\footnotemark	\علامت زیر نویس
\footnoterule	\خط زیر نویس
\footnotesep	\فاصله تا زیر نویس
\footnotesize	\اندازه زیر نویس
\footnotetext	\متن زیر نویس
\footskip	\فاصله تا پایین صفحه
\frame	\فریم
\framebox	\کادر با خط
\frenchspacing	\فواصل یکنواخت لاتین
\frontmatter	\مطلب پیش
\futurelet	\بعد بگذار

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Command in T <sub>E</sub> X or L <sup>A</sup> T <sub>E</sub> X	Equivalent Persian Command
\@gobble	@خور حریصانه
\@gobbletwo	@خور حریصانه دو
\@gobblefour	@خور حریصانه چهار
\@gtempa	@عاقبت آ
\@gtempb	@عاقبت ب
\gdef	تعریف
\GenericInfo	\الگوی اطلاع
\GenericWarning	\الگوی هشدار
\GenericError	\الگوی خطا
\global	\عام
\globaldefs	\تعاریف عام
\glossary	\لغت نامه
\glossaryentry	\فقره فرهنگ
\goodbreak	\خوش شکن
\graphpaper	\کاغذ گراف
\guillemotleft	\گیومه چپ
\guillemotright	\گیومه راست
\guilsinglleft	\گیومه تکی چپ
\guilsinglright	\گیومه تکی راست
\halign	\ردیف
\hang	\برو تو
\hangafter	\بعد از سطر
\hangindent	\تورفتگی ثابت
\hbadness	\بدنمایی
\hbox	\کادر
\headheight	\بلندای سر صفحه
\headsep	\فاصله از سر صفحه
\headtoname	\سربه نام
\heartsuit	\دل
\height	\بلندا
\hfil	\پرا
\hfill	\پررا
\hfilneg	\رفع پرا
\hfuzz	\پرزاقی
\hideskip	\فاصله مخفی
\hidewidth	\عرض پنهان
\hline	\خط پر
\hoffset	\حاشیه
\holdinginserts	\حفظ درج
\hrboxsep	\فاصله اگر
\hrule	\خط
\hrulefill	\پرخط
\hsize	\طول سطر
\hskip	\فاصله
\hspace	\فضای
\hss	\هر دو

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Command in T <sub>E</sub> X or L <sup>A</sup> T <sub>E</sub> X	Equivalent Persian Command
\ht	\ارتفاع
\huge	\بزرگ
\Huge	\بزرگ تر
\hyperlink	\ابر پیوند
\hypersetup	\بارگذاری ابر
\hypertarget	\هدف ابر
\hyphenation	\تیره بندی
\hyphenchar	\نویسه تیره
\hyphenpenalty	\جریمه تیره بندی
\ifclassloaded	\@گر کلاس فراخوانی شده
\ifdefinable	\@گر ترش دنی
\ifnextchar	\@گر نویسه بعدی
\ifpackageloaded	\@گر سبک فراخوانی شده
\ifstar	\@گر ستاره
\ifundefined	\@گر تعریف نشده
\if	\گر
\if@tempswa	\@گر@سواقت آ
\ifcase	\گرانواع
\ifcat	\گررده
\ifdefined	\گر تعریف شده
\ifdim	\گر بعد
\ifeof	\گر ته پرونده
\iff	\گرر
\iffalse	\گر نادرست
\ifFileExists	\گر پرونده موجود
\ifhbox	\گر کادرا
\ifhmode	\گر حالت ا
\ifinner	\گر درونی
\ifmmode	\گر حالت ریاضی
\ifnum	\گر عدد
\ifodd	\گر فرد
\ifthenelse	\گر آنگاه دیگر
\iftrue	\گر درست
\ifvbox	\گر کادرو
\ifvmode	\گر حالت و
\ifvoid	\گر تهی
\ifx	\گر تام
\ignorespaces	\فاصله خالی را ندیده بگیر
\immediate	\فوری
\include	\شامل
\includegraphics	\درج تصویر
\includeonly	\مشمولین
\indent	\تورفتگی
\index	\درنمایه
\indexentry	\استعلام
\indexname	\عنوان نمایه

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Command in T <sub>E</sub> X or L <sup>A</sup> T <sub>E</sub> X	Equivalent Persian Command
<code>\indexspace</code>	\فاصله رهنما
<code>\input</code>	\ورودی
<code>\InputIfFileExists</code>	\ورود پرونده گرموجود
<code>\inputlineno</code>	\شماره سطرورودی
<code>\insert</code>	\درج
<code>\insertpenalties</code>	\جریمه درج
<code>\interfootnotelinepenalty</code>	\جریمه بین سطرهای زیرنویس
<code>\interdisplaylinepenalty</code>	\جریمه بین سطرهای نمایش
<code>\interlinepenalty</code>	\جریمه بین سطرها
<code>\intertext</code>	\متن داخلی
<code>\intertextsep</code>	\فاصله شناورد رمتن
<code>\invisible</code>	\مخفی
<code>\itdefault</code>	\پیش فرض ای
<code>\itshape</code>	\شکل ایتالیک
<code>\item</code>	\فقره
<code>\itemindent</code>	\تورفتگی فقره
<code>\itemsep</code>	\فاصله فقره
<code>\iterate</code>	\تکرارکن
<code>\itshape</code>	\شکل ای
<code>\jobname</code>	\نام کار
<code>\jot</code>	\قلپ
<code>\kern</code>	\دوری
<code>\kill</code>	\الگو
<code>\label</code>	\برچسب
<code>\labelenumi</code>	\برچسب شمارش یک
<code>\labelenumii</code>	\برچسب شمارش دو
<code>\labelenumiii</code>	\برچسب شمارش سه
<code>\labelenumiv</code>	\برچسب شمارش چهار
<code>\labelitemi</code>	\برچسب فقره یک
<code>\labelitemii</code>	\برچسب فقره دو
<code>\labelitemiii</code>	\برچسب فقره سه
<code>\labelitemiv</code>	\برچسب فقره چهار
<code>\labelsep</code>	\فاصله از برچسب
<code>\labelwidth</code>	\پهنای برچسب
<code>\language</code>	\زبان
<code>\large</code>	\درشت
<code>\Large</code>	\درشت تر
<code>\LARGE</code>	\درشت درشت
<code>\lastbox</code>	\آخرین کادر
<code>\lastkern</code>	\آخرین دوری
<code>\lastpenalty</code>	\آخرین جریمه
<code>\lastskip</code>	\آخرین فاصله
<code>\LaTeX</code>	\لاتک
<code>\LaTeXe</code>	\لاتک ای
<code>\lccode</code>	\کد کوچک
<code>\ldots</code>	\نقاط خ

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Command in T <sub>E</sub> X or L <sup>A</sup> T <sub>E</sub> X	Equivalent Persian Command
<code>\leaders</code>	\نشانگر
<code>\leavevmode</code>	\ترک و
<code>\left</code>	\چپ
<code>\leftmargin</code>	\حاشیه چپ
<code>\leftmargini</code>	\حاشیه چپ یک
<code>\leftmarginii</code>	\حاشیه چپ دو
<code>\leftmarginiii</code>	\حاشیه چپ سه
<code>\leftmarginiv</code>	\حاشیه چپ چهار
<code>\leftmarginv</code>	\حاشیه چپ پنج
<code>\leftmarginvi</code>	\حاشیه چپ شش
<code>\leftmark</code>	\علامت چپ
<code>\leftpageskip</code>	\کادر تا چپ
<code>\leftskip</code>	\فاصله ابتدای سطر
<code>\let</code>	\بگذار
<code>\line</code>	\سطر
<code>\linebreak</code>	\سطر شکن
<code>\linepenalty</code>	\جریمه سطر
<code>\lineskip</code>	\فاصله سطرها
<code>\lineskiplimit</code>	\حد فاصله سطر
<code>\linespread</code>	\کشش فاصله سطر
<code>\linethickness</code>	\ضخامت خط
<code>\linewidth</code>	\پهنای سطر
<code>\listfigurename</code>	\عنوان فهرست اشکال
<code>\listfiles</code>	\لیست پرونده ها
<code>\listoffigures</code>	\فهرست اشکال
<code>\listoftables</code>	\فهرست جداول
<code>\listparindent</code>	\تورفتگی بند لیست
<code>\listtablename</code>	\عنوان فهرست جداول
<code>\LoadClass</code>	\بارکن طبقه
<code>\LoadClassWithOptions</code>	\بارکن طبقه با گزینه
<code>\location</code>	\مکان
<code>\long</code>	\بلند
<code>\loop</code>	\حلقه
<code>\looseness</code>	\گسیختگی
<code>\lower</code>	\انتقال پایین
<code>\@makeother</code>	\@دیگر
<code>\@m</code>	\@زار
<code>\@M</code>	\ده@زار
<code>\@Mi</code>	\ده@زاریک
<code>\@Mii</code>	\ده@زار دو
<code>\@Miii</code>	\ده@زار سه
<code>\@Miv</code>	\ده@زار چهار
<code>\@MM</code>	\بیس@زار
<code>\m@ne</code>	\من@ا
<code>\mag</code>	\بزرگ نمایی
<code>\magstep</code>	\گام

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Command in T <sub>E</sub> X or L <sup>A</sup> T <sub>E</sub> X	Equivalent Persian Command
<code>\magstephalf</code>	\نیم گام
<code>\mainmatter</code>	\مطلب اصلی
<code>\makeatletter</code>	\ات حرف
<code>\makeatother</code>	\ات دیگر
<code>\makebox</code>	\کادر بی خط
<code>\makeglossary</code>	\ساخت فرهنگ
<code>\makeindex</code>	\تهیه نمایه
<code>\makelabel</code>	\ساخت برچسب
<code>\makelabels</code>	\ساخت برچسب ها
<code>\MakeLowercase</code>	\ساخت حروف کوچک
<code>\maketitle</code>	\عنوان ساز
<code>\MakeUppercase</code>	\ساخت حروف بزرگ
<code>\marginpar</code>	\در حاشیه
<code>\marginparpush</code>	\فاصله دو حاشیه
<code>\marginparsep</code>	\فاصله تا حاشیه
<code>\marginparwidth</code>	\پهنای حاشیه
<code>\mark</code>	\علامت
<code>\markboth</code>	\علامت در دو طرف
<code>\markright</code>	\علامت در راست
<code>\mathaccent</code>	\اعراب ریاضی
<code>\mathchar</code>	\نویسه ریاضی
<code>\mathchardef</code>	\تعریف نویسه ریاضی
<code>\mathcode</code>	\کد ریاضی
<code>\mathrm</code>	\ریاضی رومن
<code>\maxdeadcycles</code>	\حد اکثر تکرار
<code>\maxdepth</code>	\حد اکثر عمق صفحه
<code>\maxdimen</code>	\بعد بیشین
<code>\mbox</code>	\کادر بی
<code>\mdseries</code>	\شماریل نازک
<code>\meaning</code>	\معنا
<code>\mediumseries</code>	\نازک
<code>\medmuskip</code>	\فاصله متوسط ریاضی
<code>\medskip</code>	\پرش متوسط
<code>\medskipamount</code>	\مقدار پرش متوسط
<code>\medspace</code>	\فضای متوسط
<code>\message</code>	\پیام
<code>\MessageBreak</code>	\پیام شکن
<code>\minrowclearance</code>	\حد اقل فاصله ردیف
<code>\mkern</code>	\دوری ریاضی
<code>\month</code>	\ماه
<code>\moveleft</code>	\انتقال بچپ
<code>\moveright</code>	\انتقال بر راست
<code>\mskip</code>	\فاصله ریاضی
<code>\m@th</code>	\ری@ضی
<code>\multicolumn</code>	\چند ستونی
<code>\multiply</code>	\ضرب

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Command in T <sub>E</sub> X or L <sup>A</sup> T <sub>E</sub> X	Equivalent Persian Command
<code>\multispan</code>	\چندادغام
<code>\muskip</code>	\میوفاصله
<code>\muskipdef</code>	\تعریف میوفاصله
<code>\@namedef</code>	\@ترنام
<code>\@nameuse</code>	\@کاربردنام
<code>\@ne</code>	\@یک
<code>\name</code>	\نام
<code>\natural</code>	\طبیعی
<code>\narrow</code>	\باریک
<code>\narrower</code>	\باریکتر
<code>\NeedsTeXFormat</code>	\شکلبندی مورد نیاز
<code>\neg</code>	\منفی
<code>\negmedspace</code>	\فضای متوسط منفی
<code>\negthickspace</code>	\فضای ضخیم منفی
<code>\negthinspace</code>	\دوری کوچک منفی
<code>\newboolean</code>	\بولی نو
<code>\newbox</code>	\کادر جدید
<code>\newcommand</code>	\فرمان نو
<code>\newcount</code>	\شمار جدید
<code>\newcounter</code>	\شمارنده جدید
<code>\newdimen</code>	\بعد جدید
<code>\newenvironment</code>	\محیط نو
<code>\newfam</code>	\خانواده جدید
<code>\newfont</code>	\قلم نو
<code>\newhelp</code>	\کمک جدید
<code>\newif</code>	\اگر جدید
<code>\newinsert</code>	\درج جدید
<code>\newlabel</code>	\برچسب جدید
<code>\newlength</code>	\تعریف بعد جدید
<code>\newline</code>	\سطر جدید
<code>\newlinechar</code>	\نویسه سطر جدید
<code>\newmuskip</code>	\میوفاصله جدید
<code>\newpage</code>	\صفحه جدید
<code>\newread</code>	\بخوان جدید
<code>\newsavebox</code>	\تعریف کادر جدید
<code>\newskip</code>	\فاصله جدید
<code>\newtheorem</code>	\قضیه جدید
<code>\newtoks</code>	\جزء جدید
<code>\newwrite</code>	\بنویس جدید
<code>\noalign</code>	\بی ردیف
<code>\nobreak</code>	\نشکن
<code>\nobreakspace</code>	\فاصله نشکستی
<code>\nocite</code>	\بدون سند
<code>\noexpand</code>	\نگستر
<code>\nofiles</code>	\بدون پرونده
<code>\noindent</code>	\بدون تورفتگی

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Command in T <sub>E</sub> X or L <sup>A</sup> T <sub>E</sub> X	Equivalent Persian Command
\nointerlineskip	\بی فاصله سطر
\nolimits	\بدون حد
\nolinebreak	\سطرنشکن
\nonstopmode	\پردازش بدون 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 سطر متعارف
\normallineskiplimit	\حد فاصله سطر متعارف
\normalmarginpar	\در حاشیه عادی
\normalsize	\اندازه عادی
\notag	\بدون اتیکت
\null	\نول
\nullfont	\قلم تهی
\number	\عدد
\numberline	\سطر عددی
\numberwithin	\شماره مطابق
\@evenfoot	\پایین صفحه زوج
\@evenhead	\بالای صفحه زوج
\@oddfoot	\پایین صفحه فرد
\@oddhead	\بالای صفحه فرد
\@outeqntrue	\شماره بیرون درست
\@outeqnfalse	\شماره بیرون نادرست
\obeylines	\سطر به سطر
\obeyspaces	\فضا فعال
\oddsidemargin	\حاشیه فرد
\offinterlineskip	\سطور بی فاصله
\omit	\حذف
\@onlypreamble	\@تنها در پیش در آمد
\onecolumn	\یک ستون
\onlynotes	\تنها یادداشت ها
\onlyslides	\تنها اسلایدها
\openin	\بازکن ورودی
\openout	\بازکن خروجی
\OptionNotUsed	\گزینه مصرف نشده
\or	\یا
\outer	\برونی
\output	\صفحه بندی
\outputpenalty	\جریمه صفحه بندی
\overfullrule	\علامت سرریز
\@preamblecmds	\@فرمان های پیش در آمد
\p@	\@پو

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Command in T <sub>E</sub> X or L <sup>A</sup> T <sub>E</sub> X	Equivalent Persian Command
\PackageError	\خطای سبک
\PackageInfo	\اطلاع سبک
\PackageWarning	\هشدار سبک
\PackageWarningNoLine	\هشدار سبک بی سطر
\pagebreak	\صفحه شکن
\pagecolor	\رنگ صفحه
\pagedepth	\عمق صفحه
\pagefillllstretch	\کشش پررر صفحه
\pagefillstretch	\کشش پرر صفحه
\pagefilstretch	\کشش پر صفحه
\pagegoal	\غایت صفحه
\pagename	\نام صفحه
\pagenumbering	\شماره گذاری صفحه
\pageref	\رجوع صفحه
\pagerulewidth	\ضخامت خط صفحه
\pageshrink	\فشردگی صفحه
\pagestretch	\کشش صفحه
\pagestyle	\سبک صفحه
\pagetotal	\جمع صفحه
\paperheight	\بلندای کاغذ
\paperwidth	\پهنای کاغذ
\par	\بند
\paragraph	\پاراگراف
\parallel	\موازی
\parbox	\کادر پار
\parfillskip	\فاصله ته بند
\parindent	\تورفتگی سر بند
\parsep	\فاصله بند لیست
\parshape	\شکل بند
\parskip	\فاصله بند
\part	\بخش
\partname	\عنوان بخش
\partopsep	\فاصله بالای لیست بند
\PassOptionToClass	\ارسال گزینه به کلاس
\PassOptionToPackage	\ارسال گزینه به پکیج
\path	\مسیر
\patterns	\الگوها
\pausing	\مکث
\penalty	\جریمه
\phantom	\غیب
\poptabs	\الگوی قبلی
\postdisplaypenalty	\جریمه پس نمایش
\predisplaydirection	\جهت پیش نمایش
\predisplaypenalty	\جریمه پیش نمایش
\predisplaysize	\اندازه پیش نمایش
\pretolerance	\پیش حد بد نمایی

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Command in T <sub>E</sub> X or L <sub>A</sub> T <sub>E</sub> X	Equivalent Persian Command
\prevdepth	\عمق قبلی
\prevgraf	\بند قبلی
\printindex	\نمایه در اینجا
\ProcessOptions	\پردازش گزینه ها
\protect	\تامین
\providecommand	\تهیه فرمان
\ProvidesClass	\آماده سازی طبقه
\ProvidesFile	\آماده سازی پرونده
\ProvidesPackage	\آماده سازی سبک
\pushtabs	\ثبت الگو
\quad	\کواد
\qqquad	\کو کواد
\@outputpagerestore	\@باز آیی خروج صفحه
\radical	\رادی کال
\raggedbottom	\پایین بی تنظیم
\raggedleft	\تنظیم از راست
\raggedright	\تنظیم از چپ
\raise	\انتقال ببالا
\raisebox	\بالا بر
\raisetag	\ترفع اتيکت
\rangle	\زاویه ر
\rceil	\سقف ر
\read	\بخوان
\ref	\ارجوع
\reflectbox	\کادر قرینه
\refname	\عنوان مراجع
\refstepcounter	\گام شمارنده مرجع
\relax	\راحت
\removeataskip	\رفع آخرین فاصله
\renewcommand	\فرمان از نو
\renewenvironment	\محیط از نو
\repeat	\از نو
\RequirePackage	\سبک مورد نیاز
\RequirePackageWithOptions	\سبک مورد نیاز با گزینه
\resizebox	\کادر کشیده
\reversemarginpar	\در حاشیه معکوس
\rfloor	\کف ر
\right	\راست
\rightmargin	\حاشیه راست
\rightmark	\علامت راست
\rightpageskip	\کادر تا راست
\rightskip	\فاصله انتهای سطر
\rmdefault	\رومن عادی
\rmfamily	\فامیل رومن
\Roman	\رومن بزرگ
\roman	\رومن کوچک

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## Command in T<sub>E</sub>X or L<sup>A</sup>T<sub>E</sub>X      Equivalent Persian Command

<code>\romannumeral</code>	\عدد رومی
<code>\rotatebox</code>	\کادر چرخان
<code>\rowcolor</code>	\رنگ ردیف
<code>\rule</code>	\خط
<code>\@secondoftwo</code>	\@دومی ازدو
<code>\@spaces</code>	\@فضاها
<code>\samepage</code>	\همین صفحه
<code>\savebox</code>	\مقدار کادر
<code>\sbox</code>	\مقکادر
<code>\scalebox</code>	\کادر اندازه
<code>\scdefault</code>	\پیش فرض تمام بزرگ
<code>\scshape</code>	\شکل تمام بزرگ
<code>\scriptfont</code>	\قلم توان
<code>\scriptscriptfont</code>	\قلم توان توان
<code>\scriptscriptstyle</code>	\سبک ته نوشت ته نوشت
<code>\scriptsize</code>	\اندازه پانویس
<code>\scriptstyle</code>	\سبک ته نوشت
<code>\scrollmode</code>	\پردازش گذری
<code>\section</code>	\قسمت
<code>\secdef</code>	\تعریف قسمت
<code>\see</code>	\ببینید
<code>\seealso</code>	\نیز ببینید
<code>\seename</code>	\نام ببینید
<code>\selectfont</code>	\قلم بردار
<code>\setboolean</code>	\تنظیم بولی
<code>\setbox</code>	\در کادر
<code>\setcounter</code>	\مقدار شمارنده
<code>\setkeys</code>	\مقدار کلیدها
<code>\setlength</code>	\مقدار بعد
<code>\setminus</code>	\تنظیم منها
<code>\SetSymbolFont</code>	\تعریف قلم علائم
<code>\settodepth</code>	\تنظیم به عمق
<code>\settoheight</code>	\تنظیم به ارتفاع
<code>\settowidth</code>	\مقدار بعد به اندازه
<code>\sfcode</code>	\کد ضریب فاصله
<code>\sfdefault</code>	\پیش فرض س ف
<code>\sffamily</code>	\فامیل سن سریف
<code>\shadowbox</code>	\کادر سایه دار
<code>\sharp</code>	\تیز
<code>\shipout</code>	\بفرست
<code>\shortstack</code>	\پشته کوتاه
<code>\show</code>	\نمایش بده
<code>\showbox</code>	\نمایش بده کادر
<code>\showboxbreadth</code>	\میزان نمایش کادر
<code>\showboxdepth</code>	\عمق نمایش کادر
<code>\showlists</code>	\نمایش بده لیستها

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Command in T <sub>E</sub> X or L <sup>A</sup> T <sub>E</sub> X	Equivalent Persian Command
\showthe	\نمایش بده محتوای
\simplefontmode	\حالت ساده قلم
\sift@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	\مقدار پرش کوتاه
\smash	\کوب
\smile	\لبخند
\snglftlocatcode	\کد مکان همانطور
\space	\فضا
\spacefactor	\ضریب فاصله
\spaceskip	\فاصله کلمات
\spadesuit	\پیک
\span	\ادغام
\special	\ویژه
\splitmaxdepth	\حد اکثر عمق ستون
\splittopskip	\فاصله بالای ستون
\star	\ستاره
\stepcounter	\گام شمارنده
\stretch	\کشی
\string	\رشته
\strut	\شمع
\strutbox	\کادر شمع
\subitem	\زیر بند
\subparagraph	\زیر پاراگراف
\subsection	\زیر قسمت
\substack	\زیر پشته
\subsubitem	\زیر زیر بند
\subsubsection	\زیر زیر قسمت
\subset	\زیر مجموعه
\subseteq	\زیر مجموعه مسا
\supereject	\منتهای صفحه
\suppressfloats	\حذف مکان شناور
\@tempa	\موقت آ
\@tempb	\موقت ب
\@tempc	\موقت پ
\@tempd	\موقت ت

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Command in T <sub>E</sub> X or L <sup>A</sup> T <sub>E</sub> X	Equivalent Persian Command
\@tempe	@موقت
\@tempboxa	@کادرقت آ
\@tempcnta	@شماقت آ
\@tempcntb	@شماقت ب
\@tempdima	@بعدقت آ
\@tempdimb	@بعدقت ب
\@tempdimc	@بعدقت پ
\@tempskipa	@فاقت آ
\@tempskipb	@فاقت ب
\@tempwafalse	@سواقت آ نادرست
\@tempwattrue	@سواقت آ درست
\@temptokena	@جزقت آ
\@thefnmark	\انگ زیرنویس
\@thirdofthree	@سومی از سه
\tabbingsep	\فاصله جاگذاری
\tabcolsep	\فاصله بین ستونها
\tableofcontents	\فهرست مطالب
\tablename	\عنوان جدول
\tabskip	\فاصله ستونها
\tabularnewline	\ته سطر جدول
\tag	\اتیکت
\telephone	\تلفن
\TeX	\تک
\text	\متن
\textbullet	\گلوله متنی
\textfont	\قلم متن
\textemdash	\ام دش متنی
\textendash	\ان دش متنی
\textexclamdown	\تعجب وارونه متنی
\textperiodcentered	\نقطه وسط متنی
\textquestiondown	\سوال وارونه متنی
\textquotedblleft	\نقل چپ متنی دولا
\textquotedblright	\نقل راست متنی دولا
\textquoteleft	\نقل متنی چپ
\textquoteright	\نقل متنی راست
\textvisiblespace	\فضای نمایان متنی
\textbackslash	\شکافت پشت متنی
\textbar	\میله متنی
\textgreater	\بزرگ تر متنی
\textless	\کمتر متنی
\textbf	\متن سیاه
\textcircled	\مدور متنی
\textcolor	\رنگ متن
\textcompwordmark	\نشان کلمه مرکب متن
\textfloatsep	\فاصله متن و شناور
\textfraction	\نسبت متن

*Continued on next page*



Command in T <sub>E</sub> X or L <sup>A</sup> T <sub>E</sub> X	Equivalent Persian Command
<code>\textheight</code>	\بلندای متن
<code>\textindent</code>	\متن تورفته
<code>\textit</code>	\متن ایتالیک
<code>\textmd</code>	\متن نازک
<code>\textnormal</code>	\متن نرمال
<code>\textregistered</code>	\ثبتي متني
<code>\textrm</code>	\متن رومن
<code>\textsc</code>	\متن تمام بزرگ
<code>\textsf</code>	\متن سن سریف
<code>\textsl</code>	\متن خوابیده
<code>\textstyle</code>	\سبك متني
<code>\textsuperscript</code>	\بالا نویسی متنی
<code>\texttrademark</code>	\علامت تجاری متنی
<code>\texttt</code>	\متن تایپ
<code>\textup</code>	\متن ایستاده
<code>\textwidth</code>	\پهنای متن
<code>\thanks</code>	\زیرنویس عنوان
<code>\the</code>	\محتوای
<code>\thempfn</code>	\این زیرنویس
<code>\thicklines</code>	\خط ها ضخیم
<code>\thickmuskip</code>	\فاصله زیاد ریاضی
<code>\thinmuskip</code>	\فاصله کم ریاضی
<code>\thickspace</code>	\فضا ضخیم
<code>\thinlines</code>	\خط ها نازک
<code>\thinspace</code>	\دوری کوچک
<code>\thisfancy page</code>	\این صفحه تجملی
<code>\thispage style</code>	\سبك این صفحه
<code>\thr@@</code>	\سه @
<code>\tilde</code>	\مد
<code>\tiny</code>	\ظریف
<code>\time</code>	\زمان
<code>\times</code>	\ضرب در
<code>\title</code>	\عنوان
<code>\to</code>	\به
<code>\today</code>	\امروز
<code>\toks</code>	\جزء
<code>\toksdef</code>	\تعریف جزء
<code>\tolerance</code>	\حد بد نمایی
<code>\top</code>	\بالا
<code>\topfigrule</code>	\خط بالای شناور
<code>\topfraction</code>	\نسبت بالا
<code>\topmargin</code>	\حاشیه بالا
<code>\topmark</code>	\علامت بالا
<code>\toppageskip</code>	\کادر تا بالا
<code>\topsep</code>	\فاصله بالای لیست
<code>\topskip</code>	\فاصله بالا

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Command in T <sub>E</sub> X or L <sup>A</sup> T <sub>E</sub> X	Equivalent Persian Command
\totalheight	\بلندای کل
\tracingall	\ردگیری کل
\tracingcommands	\ردگیری فرامین
\tracinglostchars	\ردگیری حروف
\tracingmacros	\ردگیری ماکروها
\tracingonline	\ردگیری نمایشی
\tracingoutput	\ردگیری صفحه بندی
\tracingpages	\ردگیری صفحات
\tracingparagraphs	\ردگیری بندها
\tracingrestores	\ردگیری بازگردانی
\tracingstats	\ردگیری آمارها
\triangle	\مثلث
\ttdefault	\پیش فرض تایپ
\ttfamily	\فامیل تایپ
\tw@	\دو@
\twocolumn	\دو ستون
\typein	\درنویس
\typeout	\برنویس
\uccode	\کد بزرگ
\uchyph	\تیره بندی بزرگ
\undefined	\تعریف نشده
\underline	\زیر خط
\unhbox	\بی کادر
\unhcopy	\بی کپی
\unitlength	\واحد طول
\unkern	\برگشت دوری
\unpenalty	\برگشت جریمه
\unskip	\برگشت فاصله
\unvbox	\بی کادرو
\unvcopy	\بی کپی و
\updefault	\پیش فرض ایستاده
\upshape	\شکل ایستاده
\usebox	\از کادر
\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	\کادرو وسط
\verb	\همانطور
\vfil	\پرو

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Command in T <sub>E</sub> X or L <sup>A</sup> T <sub>E</sub> X	Equivalent Persian Command
\vfill	\پررو
\vfilneg	\رفع پرو
\vfuzz	\پر زعمودی
\visible	\نمایان
\vline	\خط عمود
\voffset	\حاشیه و
\voidb@x	\ک@ در تهی
\vpageref	\ارجاع صفحه ع
\vrbboxsep	\فاصله و گرد
\vref	\ارجاع ع
\vrule	\خط و
\vsize	\طول صفحه
\vskip	\فاصله و
\vspace	\فضای و
\vsplit	\شکست و
\vss	\هر دو و
\vtop	\کادر گود
\wd	\عرض
\whiledo	\مادام بکن
\widehat	\کلاه پهن
\widetilde	\مد پهن
\widowpenalty	\جریمه ته بند
\width	\پهنای
\wlog	\در کارنامه
\write	\بنویس
\@xobeysp	\@ فضای لاتین
\@xxxii	\سی@ دو
\xdef	\ترگج
\xleaders	\نشانه گسترشی
\xspaceskip	\فاصله اضافی کلمات
\year	\سال
\z@	\@ فر
\z@skip	\@ فر فاصله

Table 2: The Equivalent XePersian Commands

Command in XePersian	Equivalent Persian Command
\autofootnoterule	\خط زیر نویس خود کار
\AutoMathDigits	\اعداد فرمولها خود کار
\DefaultMathDigits	\اعداد فرمولها لاتین
\deflatinfont	\تعریف قلم لاتین
\defpersianfont	\تعریف قلم پارسی
\hboxL	\کادر چپ
\hboxR	\کادر راست

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Command in XePersian	Equivalent Persian Command
\keyval@eq@alias@key	\معادل@کلید
\Latincite	\مرجع لاتین
\latinfont	\قلم لاتین
\latintoday	\امروز لاتین
\leftfootnoterule	\خط زیرنویس چپ
\lr	\متن لاتین
\LRE	\چپ براست
\LTRdblcol	\دوستونی چپ
\LTRfootnote	\پانویس
\LTRfootnotetext	\متن پانویس
\LTRthanks	\پانویس عنوان
\persianday	\روز پارسی
\persianfont	\قلم پارسی
\PersianMathDigits	\اعداد فرمولها پارسی
\persianmonth	\ماه پارسی
\persianyear	\سال پارسی
\plq	\علامت چپ نقل قول پارسی
\prq	\علامت راست نقل قول پارسی
\rightfootnoterule	\خط زیرنویس راست
\rl	\متن پارسی
\RLE	\راست بچپ
\RTLdblcol	\دوستونی راست
\RTLfootnote	\پانویشت
\RTLfootnotetext	\متن پانویشت
\RTLthanks	\پانویشت عنوان
\@SepMark	\@علامت بین
\SepMark	\علامت بین
\setdefaultbibitems	\بگذار مرجوعات عادی
\setdefaultmarginpar	\بگذار در حاشیه عادی
\setmathdigitfont	\گزینش قلم اعداد فرمولها
\setfootnoteLR	\بگذار زیرنویس چپ
\setfootnoteRL	\بگذار زیرنویس راست
\setlatintextfont	\گزینش قلم لاتین متن
\setLTR	\بگذار متن چپ
\setLTRbibitems	\بگذار مرجوعات چپ
\setLTRmarginpar	\بگذار در حاشیه چپ
\setRTL	\بگذار متن راست
\setRTLbibitems	\بگذار مرجوعات راست
\setRTLmarginpar	\بگذار در حاشیه راست
\settextfont	\گزینش قلم متن
\textwidthfootnoterule	\خط زیرنویس پهنای متن
\twocolumnstableofcontents	\فهرست مطالب دوستونی
\unsetfootnoteRL	\نگذار زیرنویس راست
\unsetLTR	\نگذار متن چپ
\unsetRTL	\نگذار متن راست
\vboxL	\کادر واز چپ

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Command in XePersian	Equivalent Persian Command
<code>\vboxR</code>	<code>\کادر واز راست</code>
<code>\XeLaTeX</code>	<code>\زی لاتک</code>
<code>\XePersian</code>	<code>\زی پرشین</code>
<code>\xepersianversion</code>	<code>\گونه زی پرشین</code>
<code>\xepersiandate</code>	<code>\تاریخ گونه زی پرشین</code>
<code>\XeTeX</code>	<code>\زی تک</code>

Table 3: The Equivalent  $\text{\LaTeX}$  Environments

Environment in $\text{\LaTeX}$	Equivalent Persian Environment
<code>abstract</code>	چکیده
<code>appendix</code>	پیوست
<code>array</code>	آرایه
<code>center</code>	وسط چین
<code>description</code>	توضیح
<code>displaymath</code>	ریاضی نمایشی
<code>document</code>	نوشتار
<code>enumerate</code>	شمارش
<code>figure</code>	شکل
<code>figure*</code>	شکل*
<code>filecontents</code>	محتوای پرونده
<code>filecontents*</code>	محتوای پرونده*
<code>flushleft</code>	چپ چین
<code>flushright</code>	راست چین
<code>itemize</code>	فقرات
<code>letter</code>	نامه
<code>list</code>	لیست
<code>longtable</code>	جدول دراز
<code>lrbox</code>	کادر رچ
<code>math</code>	ریاضی
<code>matrix</code>	ماتریس
<code>minipage</code>	صفحه کو چک
<code>multicols</code>	چند ستونی ها
<code>multiline</code>	چند خطی
<code>note</code>	یادداشت
<code>overlay</code>	انباشتن
<code>picture</code>	تصویر
<code>quotation</code>	اقتباس
<code>quote</code>	نقل
<code>slide</code>	اسلاید
<code>sloppypar</code>	پارنا مرتب
<code>split</code>	شکافتن
<code>subarray</code>	زیر آرایه
<code>tabbing</code>	جاگذاری

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Environment in $\text{\LaTeX}$	Equivalent Persian Environment
table	لوح
table*	لوح*
tabular	جدول
tabular*	جدول*
thebibliography	مراجع
theindex	محتوای نمایه
titlepage	صفحه عنوان
trivlist	لیست بدوی
verbatim	همانطور که هست
verbatim*	همانطور که هست*
verse	شعر

Table 4: The Equivalent XePersian Environments

Environment in XePersian	Equivalent Persian Environment
latin	لاتین
LTR	متن چپ
LTRitems	دسته بندی چپ
persian	پارسی
RTL	متن راست
RTLitems	دسته بندی راست

**Localisation of position arguments.** Some environments like `tabular` and some commands like `\parbox` have an argument which specifies the position. Table 5 shows their localisations.

Table 5: The Equivalent  $\text{\LaTeX}$  position arguments

Position argument in $\text{\LaTeX}$	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

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### Position argument in $\text{\LaTeX}$    Equivalent Persian position argument

☞ There are two `ps` in Table 5, first `p` and its Persian equivalent پ stand for paragraph (used in `tabular` and similar environments) and the second `p` and its Persian equivalent ص stand for page (used in `float`-like environments).

#### 2.4.8 Localizations of the keys and key values of `graphicx` package

The equivalent Persian keys and key values of `graphicx` package is shown in Table 6 and Table 7 respectively.

Table 6: Persian Equivalent keys of `graphicx` package

Original Key	Equivalent Persian Key
<code>draft</code>	پیش نویس
<code>origin</code>	مبدا
<code>clip</code>	بی اضافه
<code>keepaspectratio</code>	حفظ تناسب
<code>natwidth</code>	پهنای طبیعی
<code>natheight</code>	بلندای طبیعی
<code>bb</code>	مختصات
<code>viewport</code>	محدوده نمایش
<code>trim</code>	حذف اطراف
<code>angle</code>	زاویه
<code>width</code>	پهنا
<code>height</code>	بلندا
<code>totalheight</code>	بلندای کل
<code>scale</code>	ضریب
<code>type</code>	نوع
<code>ext</code>	پسوند
<code>read</code>	خواندنی
<code>command</code>	فرمان
<code>x</code>	طول
<code>y</code>	عرض
<code>units</code>	واحد

Table 7: Persian Equivalent key values of `graphicx` package

Original Key value	Equivalent Persian Key value
<code>b</code>	ز
<code>B</code>	ک
<code>false</code>	نادرست
<code>l</code>	چ
<code>r</code>	ر
<code>t</code>	ب
<code>true</code>	درست

#### 2.4.9 Localizations of font features and font feature options

The equivalent Persian font features and font feature options is shown in Table 8 and Table 9 respectively.





Table 8: Persian Equivalent font features



Original font feature	Equivalent Persian font feature
ExternalLocation	مکان خارجی
ExternalLocation	مسیر
Renderer	تحویل دهنده
BoldFont	قلم سیاه
Language	زبان
Script	خط
UprightFont	قلم عمودی
ItalicFont	قلم ایتالیک
BoldItalicFont	قلم ایتالیک سیاه
SlantedFont	قلم خوابیده
BoldSlantedFont	قلم خوابیده سیاه
SmallCapsFont	قلم کلاه کوچک
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

*Continued on next page*



Original font feature	Equivalent Persian font feature
CharacterWidth	پهنای نویسه
Numbers	ارقام
Contextuals	متی
Diacritics	تفکیک کننده ها
Letters	حروف
Kerning	دوری
VerticalPosition	موقعیت عمودی
Fractions	کسر

Table 9: Persian Equivalent font feature options

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

## 2.5 A Sample Input T<sub>E</sub>X File

```

1 \documentclass{article}
2 \usepackage{xepersian}
3 \settextfont{XB Niloofar}
4 \title{یک سند نمونه}
5 \author{نام نویسنده}
6 \begin{document}
7 \maketitle
8 \tableofcontents
9 \part{عنوان بخش}
10 ...
11 \section{عنوان قسمت}
12 ...
13 \subsection{عنوان زیر قسمت}
14 ...
15 \subsubsection{عنوان زیر زیر قسمت}
16 ...
17 \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 T<sub>E</sub>X font (fonts used in this documentation) will be used for Latin texts of your document.
- ☞ `\setmathdigitfont` will choose the Persian font for digits in math mode. By default, digits in math mode will appear in Persian form.
- ☞ `\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 T<sub>E</sub>X 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 T<sub>E</sub>X 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

```
\setiraniconfont [Options] {\font name}  
\iranicfamily \textiranicon{\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  $\TeX$  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  $\langle integer \rangle$ , where  $1 \leq integer \leq 32$  and `\adadinumeral`, and `\tartibinumeral` return **adadi**, and **tartibi** form of  $\langle integer \rangle$  respectively, where  $0 \leq integer \leq 999,999,999$ .

### 3.6 Things To Know About `\setmathdigitfont`, `\setmathsfdigitfont`, and `\setmathtttdigitfont`

`\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 `\setmathtttdigitfont` 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 `\setmathtttdigitfont`, 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 T<sub>E</sub>X'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 T<sub>E</sub>X 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 FarsiT<sub>E</sub>X Files To XePersian or Unicode

There is a python program written by Mostafa Vahedi that enables you to convert FarsiT<sub>E</sub>X files to XePersian or unicode. This program can be found in `doc` folder with the name `ftxe-0.12.py`. To convert your FarsiT<sub>E</sub>X files to XePersian, put `ftxe-0.12.py` in the same directory that your FarsiT<sub>E</sub>X 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` (FarsiT<sub>E</sub>X file) to `file.tex` (XePersian file). The general syntax of using the python script is as follow:

```
python ftxe-0.12.py [-r] [-s] [-x] [-u] input-filename1 input-filename2
```

Where

- r (DEFAULT) recursively consider files included in the given files
- s do not recursively consider files
- x (DEFAULT) insert XePersian related commands
- u only convert to unicode (and not to XePersian)

Please note that the python script will not work with versions of python later than 2.6. So you are encouraged to use version 2.6 of python to benefit from this python script.

## 6 Extra Packages And Classes

### 6.1 Magazine Typesetting

#### 6.1.1 Introduction

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

#### 6.1.2 Usage

To create<sup>2</sup> a magazine just load the class as usual<sup>3</sup>, with

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

<sup>3</sup>You also need to load `graphicx`, `xunicode` and `xepersian` packages respectively, after loading the document class and choose fonts for the main text, Latin text and digits in math formulas. For more detail see [section 2](#) of the documentation.



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

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

### 6.1.3 Front Page

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

```
\firstimage \firstarticle
```

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

```
\firstarticle{\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  $\langle subtitle \rangle$  and  $\langle pagesof \rangle$  define a subtitle and the name of the section for this piece of article.

```
\thirdarticle
```

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

```
\thirdarticle{\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 respect the original xepersian-magazine format.



```
\indexitem
```

The `indexblock` environment contains a manually edited index of `xepersian-magazine`. It takes one optional argument  $\langle title \rangle$  and places a title over the index block. To add entries inside the index just type

```
\indexitem{\langle title \rangle}{\langle reference \rangle}
```

inside the environment. The  $\langle title \rangle$  is the index entry text and the  $\langle reference \rangle$  points to a article inside `xepersian-magazine`. It will be more clear when you read [subsubsection 6.1.4](#). In order to get a correct output, it is necessary to leave a blank line between index items. The `authorblock` environment can include whatever you would like. I called it `authorblock` because I think it is nice to include some author reference in the front page: who you are, why are you doing this... This environment creates a frame box in the bottom right corner of the front page with your own logo at the top.

```
\weatheritem
```

Finally, the `weatherblock` lets you include a weather forecast. It takes one optional argument  $\langle title \rangle$  that places a title over the weather block. It can fit up to three weather icons with maximum and minimum temperatures, description and name. To add each of the weather entries type the following

```
\weatheritem{\langle image \rangle}{\langle day-name \rangle}{\langle max \rangle}{\langle min \rangle}{\langle short-des \rangle}
```

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

#### 6.1.4 Inside

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

#### 6.1.5 The article environment

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

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

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



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

```
\authorandplace \timestamp
```

The `\authorandplace{<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 [subsubsection 6.1.5](#)).



### 6.1.7 The shortarticle environment

The shortarticle environment creates a block of short article. Although it has its own title and subtitle, each piece of article within it may have a title. To use it just type:

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

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

### 6.1.8 Commands between articles

```
\articlesep \newsection
```

There are two commands you can use among the articles inside xepersian-magazine: `\articlesep` and `\newsection`. The first one does not take any parameter and just draws a line between two articles. The second changes the content of `\xepersian@section` to the new `\langle section name \rangle`. 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 L<sup>A</sup>T<sub>E</sub>X commands, using `\renewcommand` to change their behaviour.

### 6.1.10 Front Page

```
\customlogo \customminilogo \custommagazinename
```

When creating a magazine, everyone wants to show its own logo instead of xepersian-magazine default heading. To achieve this, you need to put the following command at the preamble of your document:

```
\customlogo{\langle text \rangle}  
\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 L<sup>A</sup>T<sub>E</sub>X class I added the macro `\innerTextFinalMark` to change this black square. This item will appear always following the last character of the text with the `̣` character.

`\minraggedcols`   `\raggedFormat`

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

The `\raggedFormat` macro can be redefined to fit user ragged style. Default value is `\RaggedLeft`.

`\heading`   `\foot`

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

`\heading{<left>}{<center>}{<right>}`  
`\foot{<left>}{<center>}{<right>}`

If you still prefer to use `fancyhdr` macros, use them after the `frontpage` environment. xepersian-magazine by default places no headers and footers. If you want headers and footers, then after loading xepersian package, you should write `\pagestyle{fancy}` at the preamble of your document.

#### 6.1.12 Class Options

The xepersian-magazine class is in itself an alteration of the standard article class, thus it inherits most of its class options but `twoside`, `twocolumn`, `notitlepage` and `a4paper`. If you find problems when loading other article features, please let me know to fix it. There are also five own options that xepersian-magazine implements.

**a3paper** (false) This option makes xepersian-magazine 297 mm width by 420 mm height. This option is implemented because the standard article class does not allow this document size.

**9pt** (false) Allows the 9pt font size that article class does not include (default is 10pt).

**columnlines** `columnlines` (false) Adds lines between columns in the entire xepersian-magazine. The default line width is 0.1pt but it is possible to change this by setting length `\columnlines` in the preamble.

**showgrid** (false) This option is only for developing purposes. Because the front page has a personal design using the `textpos` package, I created this grid to make easier the lay out.



## 6.2 Typesetting Multiple-choice Questions

### 6.2.1 Introduction

`xepersian-multiplechoice` is a package for making multiple choices questionnaires under  $\text{\LaTeX}$ . 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:

```
1 \begin{question}{سؤال}  
2 \false \ جواب  
3 \true ٢ جواب  
4 \false ٣ جواب  
5 \false ٤ جواب  
6 \end{question}  
7 \begin{correction}  
8 جواب واقعی و علت اینکه این جواب، جواب واقعی هست  
9 \end{correction}
```

### 6.2.5 The question Environment

The `question` environment allows you to insert questions into your document. It takes one mandatory argument which specifies the actual question’s text. The question will be displayed in a frame box, the size of the line.

```
\true \false
```

The proposed answers are displayed below the question in a list fashion (the question environment is a list-based one). Instead of using `\item` however, use either `\true` or `\false` to insert a possible answer.





### 6.2.6 Question Numbers

The `question` environment is associated with a  $\TeX$  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 \thethequestion}
```

### 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  $\TeX$  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 be too restrictive otherwise, I’m not sure, so it is possible that this restriction will be removed in future versions.

Currently, there is a built-in mechanism for checking that the number of proposed answers remains constant: when `xepersian-multiplechoice` encounters the first occurrence of the `question` environment, it remembers the number of proposed answers from there. Afterwards, any noticed difference in subsequent occurrences will generate an error. As a consequence, you never have to tell `xepersian-multiplechoice` explicitly what that number is.



## 6.3 Customising The Package

### 6.3.1 The question environment

```
\questionspace \answerstitlefont \answernumberfont
```

`\questionspace` is the amount of extra vertical space to put under the question, before the list of proposed answers. This is a  $\TeX$  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.

