

The XePersian Package



Persian for L^AT_EX 2_& over XeT_EX

Vafa Khalighi
vafakh@me.com

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1 Introduction

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

1.1 Important Notes

- ☞ The `XePersian` package only works with Xe^TE_X engine.
- ☞ Before reading this documentation, you should have read the documentation of the `bidi` package. The `XePersian` package automatically loads `bidi` package with `RTLdocument` option enabled and hence any commands that `bidi` package offers, is also available in `XePersian` package. Here, in this documentation, we will not repeat any of `bidi` package's commands.
- ☞ In previous versions ($\leq 1.0.3$) of `XePersian`, a thesis class 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 L^AT_EX 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 over XeTeX)
Description: The package supports Persian
typesetting, using fonts provided in the distribution.
Copyright © 2008-2013 Vafa Khalighi
v12.9, 2013/09/06
License: LaTeX Project Public License, version 1.3c or higher (your
choice)
Location on CTAN: /macros/xetex/latex/xepersian
```

2 Basics

2.1 Loading The Package

You can load the package in the ordinary way;

```
\usepackage [Options] {xepersian}
```

Where `options` of the package are explained later in [subsection 2.4](#).

When loading the package, it is important to know that:

- ❶ `xepersian` should be the last package that you load, because otherwise you are certainly going to overwrite `bidi` and `XePersian` package's definitions and consequently, you will not get the expected output.
- ❷ In fact, in addition to `bidi`, `XePersian` also makes sure that some specific packages are loaded before `bidi` and `XePersian`; these are those packages that `bidi` and `XePersian` modifies them for bidirectional and Persian/English typesetting.

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

For instance, consider the following minimal example:

```

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

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

```

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

See the xepersian package documentation for explanation.
Type H <return> for immediate help.
...
1.5 \begin{document}

?
```

2.2 XePersian's Symbol

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

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

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 four options:

2.4.1 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.

2.4.2 Kashida Option

If you pass `Kashida` option to the package, you will use Kashida for stretching words for better output quality and getting rid of underfull or overfull `\hbox` messages. Please note that unfortunately X series fonts of IRMUG (Iranian Mac Users Group) do not have Kashida support and if you use any of these fonts with `Kashida` option enabled, the result on the PDF viewed on the monitor is not pleasant, however the print may look fine. Hence if you are going to enable `Kashida` option , then you are advised to use either “Adobe Arabic” or “Scheherazade” fonts or any other fonts that has fine Kashida support, like `Persian Modern` font (the default font of `XePersian` package).

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

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

```
\KashidaOn \KashidaOff
```

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

☞ `\KashidaOff` disables Kashida.

2.4.3 quickindex Option

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

2.4.4 localise Option

The `localise` option is now active by default; it allows you to use most frequently-used `LATEX` commands and environments in Persian, almost like what `TEX-e-Parsi` offers. This is still work in progress and we wish to add lots more Persian equivalents of `LATEX` and `TEX` commands and environments. The Persian equivalents of `LATEX` and `TEX` commands are shown in [Table 1](#), The Persian equivalents of XePersian commands are shown in [Table 2](#), Persian equivalents of `LATEX` environments are shown in [Table 3](#) and Persian equivalents of XePersian environments are shown in [Table 4](#)

Please note that the Persian equivalents of `LATEX` and `TEX` commands and environments are only available after loading `xepersian` package. This means that you have to write all commands or environments that come before `\usepackage{xepersian}`, in its original form, i.e. `\documentclass`.

Not only you can use Persian equivalents of `LATEX` and `TEX` commands and environments, but still original `LATEX` and `TEX` commands and environments work too.

The `TEX` `LATEX` and XePersian commands and environments and their Persian equivalents listed in [Table 1](#), [Table 2](#), [Table 3](#) and [Table 4](#) is not the whole story; If any command and environment in [Table 1](#), [Table 2](#), [Table 3](#) and [Table 4](#) have a starred version, their starred version also work. For example in [Table 1](#), the Persian equivalent of `\chapter` is `فصل\`. I know that `\chapter` has a starred version, so this means `*فصل\` is also the Persian equivalent of `\chapter*`. Is that clear?

However there is more; you can localise any other commands/environments you want. You can use the following commands to localise your own commands/environments:

| |
|--|
| \eqcommand{\{command-name in Persian\}}{\{original L ^A T _E X command-name\}} |
| \eqenvironment{\{environment-name in Persian\}}{\{original L ^A T _E X environment-name\}} |

Table 1: The Equivalent L^AT_EX and T_EX Commands

| Command in T _E X or L ^A T _E X | Equivalent Persian Command |
|--|----------------------------|
| \@arstrut | \شمع جدول |
| \above | \فوق |
| \abovedisplayshortskip | \فاصله کوتاه بالای نمایش |
| \abovedisplayskip | \فاصله بالای نمایش |
| \abstractname | \عنوان چکیده |
| \accent | \اکسنت |
| \active | \فعال |
| \addcontentsline | \بیفزاسطر فهرست |
| \addpenalty | \اضافه برجایمه |
| \address | \نشانی |
| \addtocontents | \بیفزابه فهرست |
| \addtocounter | \اضافه برشمارنده |
| \addtolength | \اضافه بربعد |
| \addvspace | \بیفزافضای و |
| \adjdemerits | \تنظيم بدنمایی |
| \advance | \بیفزابر |
| \afterassignment | \بعد از انتساب |
| \aftergroup | \بعد از گروه |
| \aleph | \الف |
| \aliasfontfeature | \خصیصه مستعار قلم |
| \aliasfontfeatureoption | \انتخاب خصیصه مستعار قلم |
| \allowbreak | \شکستنی |
| \alloc@ | \اتخی |
| \allocationnumber | \تخصیص یافته |
| \allowdisplaybreaks | \شکست نمایش مجاز |
| \Alph | \حروف بزرگ |
| \alph | \حروف کوچک |
| \alsoname | \نام همچنین |
| \and | \و |
| \angle | \ازاویه |
| \appendixname | \عنوان پیوست |
| \approx | \اقریب |
| \arabic | \عربی |
| \arg | \آرگ |
| \arrayrulecolor | \رنگ خط جدول |
| \arraycolsep | \فاصله ستونهای آرایه |

Continued on next page

| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \arrayrulewidth | \ضخامت خط جدول |
| \arraystretch | \کشیدگی آرایه |
| \AtBeginDocument | \درآغازنوشتار |
| \AtEndDocument | \درپایان نوشتار |
| \AtEndOfClass | \درانتهای طبقه |
| \AtEndOfPackage | \درانتهای سبک |
| \author | \نویسنده |
| \backmatter | \مطلوب پشت |
| \backslash | \شکاف پشت |
| \badness | \بدنمایی |
| \bar | \امیله |
| \baselineskip | \فاصله کرسی |
| \baselinestretch | \کشش فاصله کرسی |
| \batchmode | \پردازش دسته‌ای |
| \begin | \شروع |
| \beginL | \شروع چپ |
| \beginR | \شروع راست |
| \begingroup | \شروع گروه |
| \belowdisplayshortskip | \فاصله کوتاه‌پایین نمایش |
| \belowdisplayskip | \فاصله پایین نمایش |
| \bf | \سیاه |
| \bfdefault | \پیش‌فرض سیاه |
| \bfseries | \شمایل سیاه |
| \bgroup | \شرگرد |
| \bibitem | \مرجوع |
| \bibliography | \کتاب نامه |
| \bibliographystyle | \اسکی کتاب نامه |
| \bibname | \عنوان کتاب نامه |
| \bigskip | \پرش بلند |
| \bigskipamount | \مقدار پرش بلند |
| \botfigrule | \خط پایین شناور |
| \botmark | \علامت پایین |
| \bottompageskip | \کادر تا پایین |
| \bottomfraction | \نسبت پایین |
| \box | \کادر |
| \boxmaxdepth | \حداکثر عمق کادر |
| \break | \بسکن |
| \bullet | \گلوله |
| \@ccclv | \دوپن@پنج |
| \@ccclvi | \دوپن@شش |

Continued on next page

| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \caption | \شرح |
| \catcode | \کدرده |
| \cc | \رونوشت |
| \ccname | \نام‌نوشت |
| \cdot | \ نقطه‌وسط |
| \cdots | \ نقاط‌وسط |
| \centering | \ تنظیم‌ازووسط |
| \centerline | \ خط‌وسط |
| \ch@ck | \ چک@ن |
| \chapter | \ فصل |
| \chaptername | \ عنوان‌فصل |
| \char | \ نویسه |
| \chardef | \ تعریف‌نویسه |
| \CheckCommand | \ بررسی‌فرمان |
| \cite | \ مرجع |
| \ClassError | \ خطای‌طبقه |
| \ClassInfo | \ اطلاع‌طبقه |
| \ClassWarning | \ هشدار‌طبقه |
| \ClassWarningNoLine | \ هشدار‌طبقه‌بی‌سطر |
| \leaders | \ انشانگر‌مرکزی |
| \cleardoublepage | \ دوصفحه‌پاک |
| \clearpage | \ صفحه‌پاک |
| \cline | \ خط‌نایر |
| \closein | \ بند‌خروجی |
| \closeout | \ بستن |
| \closing | \ جریمه‌سربند |
| \clubpenalty | \ خاج |
| \clubsuit | \ علامت‌پایین‌ستون‌اول |
| \colbotmark | \ علامت‌اول‌ستون‌اول |
| \colfirstmark | \ ارنگ |
| \color | \ کادرزنگ |
| \colorbox | \ علامت‌بالای‌ستون‌اول |
| \coltopmark | \ ارنگ‌ستون |
| \columncolor | \ بین‌ستون |
| \columnsep | \ پهنای‌ستون |
| \columnwidth | \ خط‌بین‌ستون |
| \columnseprule | \ سطر‌فهرست |
| \contentsline | \ عنوان‌فهرست‌مطالب |
| \contentsname | \ کپی |
| \copy | \ |

Continued on next page

| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \copyright | \حق‌تالیف |
| \count | \شمار |
| \count@ | @شمار\ |
| \countdef | \تعريف‌شمار |
| \cr | \سخ |
| \crcr | \سخ‌سخ |
| \csname | \نام‌فرمان |
| \CurrentOption | \گزینه‌جاری |
| \dashbox | \کادر‌بینایی |
| \dashv | \بینایی‌ع |
| \@date | \تاریخ@\ \تاریخ |
| \date | \روز |
| \day | \خط‌پایین‌شناور‌پهن |
| \dblbotfigrule | \نسبت‌پهن‌پایین |
| \dblbottomfraction | \خط‌بالای‌شناور‌پهن |
| \dblfigrule | \نسبت‌صفحه‌شناور‌پهن |
| \dblfloatautopagefraction | \فاصله‌بین‌شناور‌پهن |
| \dblfloatsep | \اکد‌مکان‌غیره‌مانطور |
| \dblfntlocatecode | \فاصله‌متن‌و‌شناور‌پهن |
| \dbltextfloatsep | \نسبت‌پهن‌بالا |
| \dbltopfraction | \اعلان‌قلم‌ثابت |
| \DeclareFixedFont | \اعلان‌پسوند‌گرافیک |
| \DeclareGraphicsExtensions | \اعلان‌دستور‌گرافیک |
| \DeclareGraphicsRule | \اعلان‌فرمان‌قلم‌قدیمی |
| \DeclareOldFontCommand | \اعلان‌گزینه |
| \DeclareOption | \اعلان‌فرمان‌قوی |
| \DeclareRobustCommand | \اعلان‌قلم‌علائم |
| \DeclareSymbolFont | \دوربسته |
| \deadcycles | \اتر |
| \def | \تعريف‌@‌کلید |
| \define@key | \تعريف‌رنگ |
| \definecolor | \درجه |
| \deg | \اکد‌ج‌داساز |
| \delcode | \جداساز |
| \delimiter | \ضریب‌جداساز |
| \delimiterfactor | \گودی |
| \depth | \اختشت |
| \diamondsuit | \ابعاد |
| \dim | \بعد |
| \dimen | |

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| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \dimen@ | \بعد@ |
| \dimen@i | \بعد@یک |
| \dimen@ii | \بعد@دو |
| \dimendef | \تعريف بعد |
| \discretionary | \تیره گذاری |
| \displaybreak | \اشکست نمایش |
| \displayindent | \تورفتگ نمایش |
| \displaystyle | \سبک نمایش |
| \displaywidth | \عرض نمایش |
| \divide | \ تقسیم |
| \documentclass | \طبقه نوشتار |
| \do | \کن |
| \dospecials | \تعویض کدها |
| \dot | \ نقطه |
| \doteq | \ نقطه مساوی |
| \dotfill | \ پر نقطه ا |
| \dots | \ نقاط |
| \doublebox | \ کادر دو لا |
| \doublerulesepcolor | \ رنگ فاصله دو خط جدول |
| \doublerulesep | \ فاصله بین دو خط |
| \downarrow | \ فلاش پایین |
| \dp | \ عمق |
| \dump | \ تخلیه |
| \edef | \ اترگ |
| \egroup | \ پاگروه |
| \eject | \ انتهای فاصله |
| \else | \ گرنہ |
| \em | \ تأکید |
| \emergencystretch | \ کشش لاجرم |
| \emph | \ موکد |
| \empty | \ پوج @\ |
| \emptyset | \ مجموعه پوج |
| \end | \ پایان |
| \endL | \ پایان چپ |
| \endR | \ پایان راست |
| \endcsname | \ پایان نام فرمان |
| \endfirsthead | \ پایان اولین سر |
| \endfoot | \ پایان پا |
| \endgraf | \ اتهبند |

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| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \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 خطأ |
| \errorstopmode | \پردازش توقف خطا |
| \escapechar | \نویسه ویژه |
| \euro | \یورو |
| \evensidemargin | \حاشیه زوج |
| \everycr | \هر سخ |
| \everydisplay | \هر نمایش |
| \everyhbox | \هر کادر را |
| \everyjob | \هر کار |
| \everymath | \هر ریاضی |
| \everypar | \هر بند |
| \everyvbox | \هر کادر و |
| \ExecuteOptions | \اجرای گزینه ها |
| \exhyphenpenalty | \حریمه اضافی تیره بندی |
| \expandafter | \بگستر پس از |
| \extracolsep | \فاصله اضافی بین ستونها |
| \@firstofone | \اولی از یک |
| \@firstoftwo | \اولی از دو |
| \f@ur | \ج @ ار |
| \fam | \خانواده |
| \fancypage | \صفحه تجملی |
| \fbox | \کادر را |
| \fboxrule | \ضخامت کادر را |
| \fboxsep | \حاشیه کادر را |
| \fcolorbox | \کادر بارنگ |
| \fi | \ارگ |

Continued on next page

| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \figurename | \عنوان‌شکل |
| \filbreak | \پرشکن |
| \fill | \پر |
| \firstmark | \علامت‌اول |
| \flat | \پهن |
| \floatpagefraction | \نسبت‌صفحه‌شناور |
| \floatingpenalty | \جریمه‌شناور |
| \floatsep | \فاصله‌بین‌شناور |
| \flushbottom | \تنظيم‌ازپایی |
| \fmtname | \شکل‌بندی |
| \fmtversion | \ردہ‌شکل‌بندی |
| \fnsymbol | \نشانه |
| \font | \قلم |
| \fontdimen | \بعد‌قلم |
| \fontencoding | \رمزینه‌قلم |
| \fontfamily | \فamilی‌قلم |
| \fontname | \نام‌قلم |
| \fontseries | \شمایل‌قلم |
| \fontshape | \شکل‌قلم |
| \fontsize | \اندازه‌قلم |
| \footheight | \بلندای‌پایین‌صفحه |
| \footins | \درج‌زیرنویس |
| \footnote | \زیرنویس |
| \footnotemark | \علامت‌زیرنویس |
| \footnoterule | \خط‌زیرنویس |
| \footnotesep | \فاصله‌تازی‌زیرنویس |
| \footnotesize | \اندازه‌زیرنویس |
| \footnotetext | \متن‌زیرنویس |
| \footskip | \فاصله‌تایین‌صفحه |
| \frame | \فریم |
| \framebox | \کادر‌باخت |
| \frenchspacing | \فوائل‌بکنواخت‌لاتین |
| \frontmatter | \مطلوب‌پیش |
| \futurelet | \بعد‌بگذار |
| \@gobble | \@خور‌حریصانه |
| \@gobbletwo | \@خور‌حریصانه‌دو |
| \@gobblefour | \@خور‌حریصانه‌چهار |
| \@gtempa | \@عاقتآ |
| \@gtempb | \@عاقت‌ب |
| \gdef | \atre |

Continued on next page

| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \GenericInfo | \الگوی اطلاع |
| \GenericWarning | \الگوی هشدار |
| \GenericError | \الگوی خطأ |
| \global | \عام |
| \globaldefs | \تعريف عام |
| \glossary | \لغت نامه |
| \glossaryentry | \فقره فرهنگ |
| \goodbreak | \اخوش شکن |
| \graphpaper | \کاغذگراف |
| \guillemotleft | \گیومه چپ |
| \guillemotright | \گیومه راست |
| \guilsinglleft | \گیومه تکی چپ |
| \guilsinglright | \گیومه تکی راست |
| \halign | \ردیف ا |
| \hang | \برو تو |
| \hangafter | \بعد از سطر |
| \hangindent | \تورفتگی ثابت |
| \hbadness | \بدنمایی ا |
| \hbox | \کادرا |
| \headheight | \بلندای سرصفحه |
| \headsep | \فاصله از سرصفحه |
| \headtoname | \سر به نام |
| \heartsuit | \دل |
| \height | \بلندا |
| \hfil | \پرا |
| \hfill | \پر پرا |
| \hfilneg | \رفع پرا |
| \hfuzz | \پر زافقی |
| \hideskip | \فاصله مخفی |
| \hidewidth | \عرض پنهان |
| \hline | \خط پر |
| \hoffset | \حاشیه ا |
| \holdinginserts | \حفظ درج |
| \hrboxsep | \فاصله اگرد |
| \hrule | \خط ا |
| \rulefill | \پر خط ا |
| \hspace | \طول سطر |
| \hskip | \فاصله ا |
| \hss | \فضای ا |
| | \هر دوا |

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| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \ht | \ارتفاع |
| \huge | \بزرگ |
| \Huge | \بزرگ تر |
| \hyperlink | \ابرپیوند |
| \hypersetup | \بارگذاری ابر |
| \hypertarget | \هدف ابر |
| \hyphenation | \تیره‌بندی |
| \hyphenchar | \نویسه‌تیره |
| \hyphenpenalty | \جریمه‌تیره‌بندی |
| \@ifclassloaded | \@گر کلاس فراخوانی شده |
| \@ifdefinable | \@گرترشدنی |
| \@ifnextchar | \@گرنویسه‌بعدی |
| \@ifpackageloaded | \@گرسبک فراخوانی شده |
| \@ifstar | \@گرستاره |
| \@ifundefined | \@گرتعریف‌نشده |
| \if | \اگر |
| \if@tempswa | \اگر @ساقت آ |
| \ifcase | \گرانواع |
| \ifcat | \گررده |
| \ifdefined | \اگر تعريف‌شده |
| \ifdim | \اگر بعد |
| \ifeof | \اگر ته پرونده |
| \iff | \اگر |
| \iffalse | \اگر نادرست |
| \IfFileExists | \اگر پرونده موجود |
| \ifhbox | \اگر کادر |
| \ifhmode | \اگر حالت |
| \ifinner | \اگر درونی |
| \ifmmode | \اگر حالت ریاضی |
| \ifnum | \اگر عدد |
| \ifodd | \اگرفرد |
| \ifthenelse | \اگر آنگاه دیگر |
| \iftrue | \اگر درست |
| \ifvbox | \اگر کادر و |
| \ifvmode | \اگر حالت و |
| \ifvoid | \اگر تهی |
| \ifx | \اگر تام |
| \ignorespaces | \فاصله خالی راندیده بگیر |
| \immediate | \فوری |
| \include | \شامل |

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| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \includegraphics | \درج تصویر |
| \includeonly | \مشمولین |
| \indent | \تورفتگی |
| \index | \درنمايه |
| \indexentry | \استعلام |
| \indexname | \عنوان نمايه |
| \indexspace | \فاصله رهema |
| \input | \ورودی |
| \InputIfFileExists | \ورود پرونده گر موجود |
| \inputlineno | \شماره سطر ورودی |
| \insert | \درج |
| \insertpenalties | \جريمه درج |
| \interfootnotelinepenalty | \جريمه بین سطرهای زیرنویس |
| \interdisplaylinepenalty | \جريمه بین سطرهای نمایش |
| \interlinepenalty | \جريمه بین سطرها |
| \intertext | \متن داخلی |
| \intertextsep | \فاصله شناور در متن |
| \invisible | \امخفی |
| \itdefault | \پیش فرض ای |
| \itshape | \شكل ایتالیک |
| \item | \فقره |
| \itemindent | \تورفتگی فقره |
| \itemsep | \فاصله فقره |
| \iterate | \تکرار کن |
| \itshape | \شكل ای |
| \jobname | \نام کار |
| \jot | \قلپ |
| \kern | \دوری |
| \kill | \الگو |
| \label | \برچسب |
| \labelenumi | \برچسب شمارش یک |
| \labelenumii | \برچسب شمارش دو |
| \labelenumiii | \برچسب شمارش سه |
| \labelenumiv | \برچسب شمارش چهار |
| \labelitemi | \برچسب فقره یک |
| \labelitemii | \برچسب فقره دو |
| \labelitemiii | \برچسب فقره سه |
| \labelitemiv | \برچسب فقره چهار |
| \labelsep | \فاصله از برچسب |
| \labelwidth | \پهنانی برچسب |

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| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \language | \ازبان |
| \large | \ادرشت |
| \Large | \ادرشت تر |
| \LARGE | \ادرشت درشت |
| \lastbox | \آخرین کادر |
| \lastkern | \آخرین دوری |
| \lastpenalty | \آخرین جریمه |
| \lastskip | \آخرین فاصله |
| \LaTeX | \لاتک |
| \LaTeXe | \لاتک ای |
| \lccode | \اکدکوچک |
| \ldots | \نقطاخ |
| \leaders | \انشانگر |
| \leavevmode | \ترک و |
| \left | \چپ |
| \leftmargin | \حاشیه چپ |
| \leftmargini | \حاشیه چپ یک |
| \leftmarginii | \حاشیه چپ دو |
| \leftmarginiii | \حاشیه چپ سه |
| \leftmarginiv | \حاشیه چپ چهار |
| \leftmarginv | \حاشیه چپ پنج |
| \leftmarginvi | \حاشیه چپ شش |
| \leftmark | \علامت چپ |
| \leftpageskip | \کادر تا چپ |
| \leftskip | \فاصله ابتدای سطر |
| \let | \ابگذار |
| \line | \اسطر |
| \linebreak | \اسطرشکن |
| \linepenalty | \جریمه سطر |
| \lineskip | \فاصله سطرها |
| \lineskiplimit | \حد فاصله سطر |
| \linespread | \کشش فاصله سطر |
| \linethickness | \ضخامت خط |
| \linewidth | \اپهنای سطر |
| \listfigurename | \عنوان فهرست اشکال |
| \listfiles | \لیست پرونده ها |
| \listoffigures | \فهرست اشکال |
| \listoftables | \فهرست جداول |
| \listparindent | \تورفتگی بند لیست |
| \listtablename | \عنوان فهرست جداول |

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| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \LoadClass | \بارکن طبقه |
| \LoadClassWithOptions | \بارکن طبقه با گزینه |
| \location | \مکان |
| \long | \بلند |
| \loop | \حلقه |
| \looseness | \گسیختگی |
| \lower | \انتقال پایین |
| \@makeother | \دیگر |
| \@m | \@زار |
| \@M | \ده@زار |
| \@Mi | \ده@زاریک |
| \@Mii | \ده@زاردو |
| \@Miii | \ده@زارسه |
| \@Miv | \ده@زارچهار |
| \@MM | \بیس@زار |
| \m@ne | \من@ا |
| \mag | \بزرگ نمایی |
| \magstep | \گام |
| \magstephalf | \نیم گام |
| \mainmatter | \مطلوب اصلی |
| \makeatletter | \ات حرف |
| \makeatother | \ات دیگر |
| \makebox | \کادر بی خط |
| \makeglossary | \اساخت فرهنگ |
| \makeindex | \تهیه نمایه |
| \makelabel | \اساخت برچسب |
| \makelabels | \اساخت برچسب ها |
| \MakeLowercase | \اساخت حروف کوچک |
| \maketitle | \عنوان ساز |
| \MakeUppercase | \اساخت حروف بزرگ |
| \marginpar | \در حاشیه |
| \marginparpush | \فاصله دو حاشیه |
| \marginparsep | \فاصله تا حاشیه |
| \marginparwidth | \پهنای حاشیه |
| \mark | \علامت |
| \markboth | \علامت در دو طرف |
| \markright | \علامت در راست |
| \mathaccent | \اعراب ریاضی |
| \mathchar | \نویسه ریاضی |
| \mathchardef | \تعريف نویسه ریاضی |

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| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \mathcode | \کد ریاضی |
| \mathrm | \ریاضی رومان |
| \maxdeadcycles | \حداکثر تکرار |
| \maxdepth | \حداکثر عمق صفحه |
| \maxdimen | \بعد بیشین |
| \mbox | \کادر بی |
| \mdseries | \شمایل نازک |
| \meaning | \معنا |
| \mediumseries | \نازک |
| \medmuskip | \فاصله متوسط ریاضی |
| \medskip | \پرش متوسط |
| \medskipamount | \مقدار پرش متوسط |
| \medspace | \فضای متوسط |
| \message | \پیام |
| \MessageBreak | \پیام شکن |
| \minrowclearance | \حداقل فاصله ردیف |
| \mkern | \دوری ریاضی |
| \month | \ماه |
| \moveleft | \انتقال بچپ |
| \moveright | \انتقال براست |
| \mskip | \فاصله ریاضی |
| \m@th | \ری @ ضی |
| \multicolumn | \چند ستونی |
| \multiply | \ضرب |
| \multispan | \چند ادغام |
| \muskip | \میوفاصله |
| \muskipdef | \تعریف میوفاصله |
| \@namedef | \@ ترnam |
| \@nameuse | \@ کاربردن انام |
| \@one | @ یک \ |
| \name | \نام |
| \natural | \طبیعی |
| \nearrow | \باریک |
| \nearrower | \باریکتر |
| \NeedsTeXFormat | \اشکل بندی موردنیاز |
| \neg | \منفی |
| \negmedspace | \فضای متوسط منفی |
| \negthickspace | \فضای ضخیم منفی |
| \negthinspace | \دوری کوچک منفی |
| \newboolean | \ابولی نو |

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| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \newbox | \کادر جدید |
| \newcommand | \فرمان نو |
| \newcount | \شمارجید |
| \newcounter | \اشمارنده جدید |
| \newdimen | \بعد جدید |
| \newenvironment | \محیط نو |
| \newfam | \خانواده جدید |
| \newfont | \اقلم نو |
| \newhelp | \کمک جدید |
| \newif | \اگر جدید |
| \newinsert | \درج جدید |
| \newlabel | \برچسب جدید |
| \newlength | \تعريف بعد جدید |
| \newline | \سطر جدید |
| \newlinechar | \نویسه سطر جدید |
| \newmuskip | \میواصاله جدید |
| \newpage | \صفحه جدید |
| \newread | \بخوان جدید |
| \newsavebox | \تعريف کادر جدید |
| \newskip | \فاصله جدید |
| \newtheorem | \قضیه جدید |
| \newtoks | \جزء جدید |
| \newwrite | \بنویس جدید |
| \noalign | \ابی ردیف |
| \nobreak | \نشکن |
| \nobreakspace | \فاصله نشکستنی |
| \nocite | \ بدون سند |
| \noexpand | \نگستر |
| \nofiles | \ بدون پرونده |
| \noindent | \ بدون تورفتگی |
| \nointerlineskip | \ابی 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 |

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| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \normalfont | \قلم عادی |
| \normallineskip | \فاصله سطر متعارف |
| \normallineskiplimit | \حد فاصله سطر متعارف |
| \normalmarginpar | \در حاشیه عادی |
| \normalsize | \اندازه عادی |
| \notag | \ بدون اتیکت |
| \null | \نول |
| \nullfont | \قلم تهی |
| \number | \ عدد |
| \numberline | \ سطر عددی |
| \numberwithin | \ شماره مطابق |
| \@evenfoot | \ پایین صفحه زوج |
| \@evenhead | \ بالای صفحه زوج |
| \@oddfoot | \ پایین صفحه فرد |
| \@oddhead | \ بالای صفحه فرد |
| \@outeqntrue | \ شماره بیرون درست |
| \@outeqnfal | \ شماره بیرون نادرست |
| \obeylines | \ سطربه سطر |
| \obeyspaces | \ فضاعمال |
| \oddsidemargin | \ حاشیه فرد |
| \offinterlineskip | \ سطربی فاصله |
| \omit | \ حذف |
| \@onlypreamble | \@ تنهای دریش درآمد |
| \onecolumn | \ یک ستون |
| \onlynotes | \ تنها یادداشت‌ها |
| \onlyslides | \ تنها اسلاید‌ها |
| \openin | \ بازکن ورودی |
| \openout | \ بازکن خروجی |
| \OptionNotUsed | \ گزینه مصرف نشده |
| \or | \ یا |
| \outer | \ بروندی |
| \output | \ صفحه بندی |
| \outputpenalty | \ جریمه صفحه بندی |
| \overfullrule | \ اعلام سرریز |
| \@preamblecmds | \@ فرمان‌های پیش درآمد |
| \p@ | \@ پو |
| \PackageError | \ خطای سبک |
| \PackageInfo | \ اطلاع سبک |
| \PackageWarning | \ هشدار سبک |
| \PackageWarningNoLine | \ هشدار سبک بی‌سطر |

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| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \pagebreak | \صفحه‌شکن |
| \pagecolor | \رنگ صفحه |
| \pagedepth | \عمق صفحه |
| \pagefilllstretch | \کشش پر رصفحه |
| \pagefillstretch | \کشش پر رصفحه |
| \pagefilstretch | \کشش پر رصفحه |
| \pagegoal | \غايت صفحه |
| \pagename | \نام صفحه |
| \pagenumbering | \شماره‌گذاري صفحه |
| \pageref | \رجوع صفحه |
| \pagerulewidth | \ضخامت خط صفحه |
| \pageshrink | \افشردگي صفحه |
| \pagestretch | \کشش صفحه |
| \pagestyle | \سبک صفحه |
| \pagetotal | \جمع صفحه |
| \paperheight | \بلنداي کاغذ |
| \paperwidth | \پهنانی کاغذ |
| \par | \بند |
| \paragraph | \پاراگراف |
| \parallel | \موازي |
| \parbox | \کادر پار |
| \parfillskip | \فاصله ته بند |
| \parindent | \تورفتگي سربند |
| \parsep | \فاصله بند لیست |
| \parshape | \شكل بند |
| \parskip | \فاصله بند |
| \part | \بخش |
| \partname | \عنوان بخش |
| \partopsep | \فاصله بالاي لیست بند |
| \PassOptionToClass | \ارسال گزينه به کلاس |
| \PassOptionToPackage | \ارسال گزينه به پکیج |
| \path | \مسیر |
| \patterns | \الگوها |
| \pausing | \مکث |
| \penalty | \جريمه |
| \phantom | \غیب |
| \poptabs | \الگوي قبلی |
| \postdisplaypenalty | \جريمه پس نمایش |
| \predisplaydirection | \جهت پيش نمایش |
| \predisplaypenalty | \جريمه پيش نمایش |

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| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \predisplaysize | \اندازیپیش نمایش |
| \pretolerance | \پیش حد بدنمایی |
| \prevdepth | \عمق قبلی |
| \prevgraf | \بند قبلی |
| \printindex | \نمایه در اینجا |
| \ProcessOptions | \بردازش گزینه ها |
| \protect | \تامین |
| \providecommand | \نهیه فرمان |
| \ProvidesClass | \آماده سازی طبقه |
| \ProvidesFile | \آماده سازی پرونده |
| \ProvidesPackage | \آماده سازی سبک |
| \pushtabs | \ثبت الگو |
| \quad | \کواد |
| \quad | \کوکواد |
| \@outputpagerestore | \@باز آیی خروج صفحه |
| \radical | \رادیکال |
| \raggedbottom | \پایین بی تنظیم |
| \raggedleft | \تنظیم از راست |
| \raggedright | \تنظیم از چپ |
| \raise | \انتقال ببالا |
| \raisebox | \بالابر |
| \raisetag | \ترفیع اتیکت |
| \rangle | \زاویه ر |
| \rciel | \سقف ر |
| \read | \بخوان |
| \ref | \رجوع |
| \reflectbox | \کادر قرینه |
| \refname | \عنوان مراجع |
| \refstepcounter | \گام شمارنده مرجع |
| \relax | \راحت |
| \removelastskip | \رفع آخرین فاصله |
| \renewcommand | \فرمان ازنو |
| \renewenvironment | \محیط ازنو |
| \repeat | \از نو |
| \RequirePackage | \سبک موردنیاز |
| \RequirePackageWithOptions | \سبک موردنیاز با گزینه |
| \resizebox | \کادر کشیده |
| \reversemarginpar | \در حاشیه معکوس |
| \rfloor | \کفر |
| \right | \راست |

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| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \rightmargin | \حاشیه راست |
| \rightmark | \علامت راست |
| \rightpageskip | \کادر تاراست |
| \rightskip | \فاصله انتهای سطر |
| \rmdefault | \رومن عادی |
| \rmfamily | \فamilی رومان |
| \Roman | \رومی بزرگ |
| \roman | \رومی کوچک |
| \romannumeral | \اعداد رومی |
| \rotatebox | \کادر چرخان |
| \rowcolor | \رنگ ردیف |
| \rule | \خط |
| \@secondoftwo | \@دویی از دو |
| \@spaces | \فضاهای |
| \samepage | \همین صفحه |
| \savebox | \مقدار کادر |
| \sbox | \مقادیر |
| \scalebox | \کادر اندازه |
| \scdefault | \پیش فرض تمام بزرگ |
| \scshape | \اشکل تمام بزرگ |
| \scriptfont | \قلم توان |
| \scriptscriptfont | \قلم توان توان |
| \scriptscriptstyle | \اسکریپت نوشت |
| \scriptsize | \اندازه پانویس |
| \scriptstyle | \اسکریپت نوشت |
| \scrollmode | \پردازش گذری |
| \section | \قسمت |
| \secdef | \تعريف قسمت |
| \see | \بینید |
| \seealso | \نیز بینید |
| \seename | \نام بینید |
| \selectfont | \قلم بردار |
| \setboolean | \تنظیم بولی |
| \setbox | \در کادر |
| \setcounter | \مقدار شمارنده |
| \setkeys | \مقدار کلیدها |
| \setlength | \مقدار بعد |
| \setminus | \تنظیم منها |
| \SetSymbolFont | \تعريف قلم علامه |
| \settodepth | \تنظیم به عمق |

Continued on next page

| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \settoheight | \انتظام به ارتفاع |
| \settowidth | \مقدار بعد به اندازه |
| \sfcode | \کد ضریب فاصله |
| \sfdefault | \پیش فرض سف |
| \sffamily | \فamilی سن سریف |
| \shadowbox | \کادر سایه دار |
| \sharp | \تیز |
| \shipout | \برست |
| \shortstack | \پشته کوتاه |
| \show | \نمایش بده |
| \showbox | \نمایش بده کادر |
| \showboxbreadth | \میزان نمایش کادر |
| \showboxdepth | \عمق نمایش کادر |
| \showlists | \نمایش بده لیستها |
| \showthe | \نمایش بده محتوای |
| \simplefontmode | \حالت ساده قلم |
| \sixt@@n | \شانزده @ |
| \skewchar | \نویسه اریب |
| \skip | \فاصله |
| \skip@ | @\فاصله |
| \skipdef | \تعریف فاصله |
| \s1 | \خوابیده |
| \s1default | \پیش فرض خو |
| \s1shape | \اشکل خوابیده |
| \sloppy | \راحت چین |
| \s1shape | \شمایل خو |
| \small | \کوچک |
| \smallskip | \پرش کوتاه |
| \smallskipamount | \مقدار پرش کوتاه |
| \smash | \کوب |
| \smile | \بخند |
| \snglfntlocatecode | \کد مکان همانطور |
| \space | \فضا |
| \spacefactor | \ضریب فاصله |
| \spaceskip | \فاصله کلمات |
| \spadesuit | \پیک |
| \span | \أدغام |
| \special | \ویژه |
| \splitmaxdepth | \حداکثر عمق ستون |
| \splittopskip | \فاصله بالای ستون |

Continued on next page

| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \star | \ستاره |
| \stepcounter | \گامشمارنده |
| \stretch | \کشی |
| \string | \رشته |
| \strut | \شمع |
| \strutbox | \کادرشمع |
| \subitem | \زیربند |
| \subparagraph | \زیرپاراگراف |
| \subsection | \زیرقسمت |
| \substack | \زیرپیشه |
| \subsubitem | \زیرزیربند |
| \subsubsection | \زیرزیرقسمت |
| \subset | \زیرمجموعه |
| \subsearrow | \زیرمجموعه مس |
| \supereject | \امنتهای صفحه |
| \suppressfloats | \حذف مکان شناور |
| \@tempa | \موقت آ |
| \@tempb | \موقتب |
| \@tempc | \موقتب |
| \@tempd | \موقتد |
| \@tempe | \موقتث |
| \@tempboxa | \کادرقت آ |
| \@tempcnta | \شماقت آ |
| \@tempcntb | \شماقت ب |
| \@tempdima | \بعدقت آ |
| \@tempdimb | \بعدقت ب |
| \@tempdimc | \بعدقت پ |
| \@tempskipa | \فاقت آ |
| \@tempskipb | \فاقت ب |
| \@tempswafalse | \سواقت آنادرست |
| \@tempswatrue | \سواقت آدرست |
| \@temptokena | \جزقت آ |
| \@thefnmark | \انگ زیرنویس |
| \@thirdofthree | \سومی ارسه |
| \tabbingsep | \فاصله جاگذاری |
| \tabcolsep | \فاصله بین ستونها |
| \tableofcontents | \فهرست مطالب |
| \tablename | \عنوان جدول |
| \tabskip | \فاصله ستونها |
| \tabularnewline | \ته سطر جدول |

Continued on next page

| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \tag | \اتیکت |
| \telephone | \تلفن |
| \TeX | \اتک |
| \text | \امتن |
| \textbullet | \اگلوله متنی |
| \textfont | \قلم متن |
| \textemdash | \امدش متنی |
| \textendash | \اندش متنی |
| \textexclamdown | \تعجب و ارونه متنی |
| \textperiodcentered | \نقطه و سطح متنی |
| \textquestiondown | \سوال و ارونه متنی |
| \textquotedblleft | \نقل چپ متنی دولا |
| \textquotedblright | \نقل راست متنی دولا |
| \textquotleft | \نقل متنی چپ |
| \textquotright | \نقل متنی راست |
| \textvisiblespace | \فضای نمایان متنی |
| \textbackslash | \شکافت پشت متنی |
| \textbar | \میله متنی |
| \textgreater | \بزرگ تر متنی |
| \textless | \کمتر متنی |
| \textbf | \امتن سیاه |
| \textcircled | \امدور متنی |
| \textcolor | \رنگ متن |
| \textcompwordmark | \انسان کلمه مرکب متن |
| \textfloatsep | \فاصله متن و شناور |
| \textfraction | \نسبت متن |
| \textheight | \بلندای متن |
| \textindent | \امتن تورفته |
| \textit | \امتن ایتالیک |
| \textmd | \امتن نازک |
| \textnormal | \امتن نرمال |
| \textregistered | \ثبتی متنی |
| \textrm | \امتن رومان |
| \textsc | \امتن تمام بزرگ |
| \textsf | \امتن سن سریف |
| \textsl | \امتن خوابیده |
| \textstyle | \سبک متنی |
| \textsuperscript | \بالانویس متنی |
| \texttrademark | \اعلامت تجاری متنی |
| \texttt | \امتن تایپ |

Continued on next page

| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \textup | \متن ایستاده |
| \textwidth | \پهنای متن |
| \thanks | \زیرنویس عنوان |
| \the | \محتوای |
| \thempfn | \این زیرنویس |
| \thicklines | \خط‌های ضخیم |
| \thickmuskip | \فاصله زیاد ریاضی |
| \thinmuskip | \فاصله کم ریاضی |
| \thickspace | \فضای ضخیم |
| \thinlines | \خط‌های نازک |
| \thinspace | \دوری کوچک |
| \thisfancytitle | \این صفحه تجملی |
| \thispagestyle | \سیک این صفحه |
| \thr@@ | @\سده |
| \tilde | \مد |
| \tiny | \ظریف |
| \time | \زمان |
| \times | \ضرب در |
| \title | \عنوان |
| \to | \به |
| \today | \امروز |
| \toks | \جزء |
| \toksdef | \تعریف جزء |
| \tolerance | \حد بدنمایی |
| \top | \بالا |
| \topfigrule | \خط بالای شناور |
| \topfraction | \نسبت بالا |
| \topmargin | \حاشیه بالا |
| \topmark | \علامت بالا |
| \topskip | \کادر تابلا |
| \topsep | \فاصله بالای لیست |
| \topskip | \فاصله بالا |
| \totalheight | \بلندای کل |
| \tracingall | \ردگیری کل |
| \tracingcommands | \ردگیری فرمان‌ها |
| \tracinglostchars | \ردگیری حروف |
| \tracingmacros | \ردگیری ماکروها |
| \tracingonline | \ردگیری نمایشی |
| \tracingoutput | \ردگیری صفحه‌بندی |
| \tracingpages | \ردگیری صفحات |

Continued on next page

| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \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 | \ کدبرگ |
| \uchyph | \ تیره بندی بزرگ |
| \undefined | \ تعریف نشده |
| \underline | \ زیرخط |
| \unhbox | \ بی کادر |
| \unhcopy | \ بی کپی |
| \unitlength | \ واحد طول |
| \unkern | \ برگشت دوری |
| \unpenalty | \ برگشت جریمه |
| \unskip | \ برگشت فاصله |
| \unvbox | \ بی کادر و |
| \unvcopy | \ بی کپی و |
| \updefault | \ پیش فرض ایستاده |
| \upshape | \ شکل ایستاده |
| \usebox | \ از کادر |
| \usecounter | \ باشمارشگر |
| \usefont | \ گزینش قلم |
| \usepackage | \ سیک لازم |
| \vobeyspaces | \ @ فضاهای فعال |
| \vvoid | \ \ تهی |
| \vadjust | \ تنظیم و |
| \valign | \ ردیف و |
| \value | \ محتواي شمارنده |
| \vbadness | \ بدنمایی و |
| \vbox | \ کادر و |
| \vcenter | \ کادر و سط |
| \verb | \ همانطور |
| \vfil | \ پرو |
| \vfill | \ پررو |
| \vfilneg | \ رفع پرو |

Continued on next page

| Command in TeX or L ^A T _E X | Equivalent Persian Command |
|---|----------------------------|
| \vfuzz | \پرزمودی |
| \visible | \نمایان |
| \vline | \خط عمود |
| \voffset | \حاشیه و |
| \voidb@x | \ک@درتهی |
| \pageref | \ارجاع صفحه ع |
| \vboxsep | \فاصله و گرد |
| \vref | \ارجاع |
| \rule | \خط و |
| \vsize | \طول صفحه |
| \skip | \فاصله و |
| \vspace | \فضای و |
| \vsplit | \شکست و |
| \vss | \هردو و |
| \vtop | \کادرگوی |
| \wd | \عرض |
| \whiledo | \اما دام بکن |
| \widehat | \کلاه پهن |
| \widetilde | \مد پهن |
| \widowpenalty | \جريمه ته بند |
| \width | \پهنا |
| \wlog | \در کارنامه |
| \write | \بنویس |
| \obeysp | \@ فضای لاتین |
| \xxxii | \سی@دو |
| \xdef | \ترجم |
| \leaders | \انشانگر گسترشی |
| \spaceskip | \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 خودکار |
| \AutoMathsDigits | \اعداد فرمولهای خودکار |
| \DefaultMathsDigits | \اعداد فرمولهای لاتین |
| \deflatinfont | \تعريف قلم لاتین |
| \defpersianfont | \تعريف قلم پارسی |
| \hboxL | \کادر اچ پ |
| \hboxR | \کادر است |

Continued on next page

| 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 | \دوسنونی چپ |
| \LTRfootnote | \پانویس |
| \LTRfootnotetext | \متن پانویس |
| \LTRthanks | \پانویس عنوان |
| \persianday | \روز پارسی |
| \persianfont | \قلم پارسی |
| \PersianMathsDigits | \اعداد فرمولهای پارسی |
| \persianmonth | \ماه پارسی |
| \persianyear | \سال پارسی |
| \plq | \علامت چپ نقل قول پارسی |
| \prq | \علامت راست نقل قول پارسی |
| \rightfootnoterule | \خط زیرنویس راست |
| \rl | \متن پارسی |
| \RLE | \راست بچپ |
| \RTLdblcol | \دوسنونی راست |
| \RTLfootnote | \پانوشت |
| \RTLfootnotetext | \متن پانوشت |
| \RTLthanks | \پانوشت عنوان |
| \@SepMark | \علامت بین |
| \SepMark | \علامت بین |
| \setdefaultbibitems | \بگذار مر جو عات عادی |
| \setdefaultmarginpar | \بگذار در حاشیه عادی |
| \setdigitfont | \اگرینش قلم اعداد فرمولها |
| \setfootnoteLR | \بگذار زیرنویس چپ |
| \setfootnoteRL | \بگذار زیرنویس راست |
| \setlatintextfont | \اگرینش قلم لاتین متن |
| \setLTR | \بگذار متن چپ |
| \setLTRbibitems | \بگذار مر جو عات چپ |
| \setLTRmarginpar | \بگذار در حاشیه چپ |
| \setRTL | \بگذار متن راست |
| \setRTLbibitems | \بگذار مر جو عات راست |
| \setRTLmarginpar | \بگذار در حاشیه راست |
| \settextfont | \اگرینش قلم متن |

Continued on next page

| Command in XePersian | Equivalent Persian Command |
|----------------------------|----------------------------|
| \textwidthfootnoterule | \خطزیرنویس بهنای متن |
| \twocolumnstableofcontents | \فهرست مطالب دوستونی |
| \unsetfootnoteRL | \انگذارزیرنویس راست |
| \unsetLTR | \انگذار متن چپ |
| \unsetRTL | \انگذار متن راست |
| \vboxL | \کادر واژچپ |
| \vboxR | \کادر واژ راست |
| \XeTeX | \ازی لاتک |
| \XePersian | \ازی پرشین |
| \xepersianversion | \گونه‌زی پرشین |
| \xepersiandate | \تاریخ گونه‌زی پرشین |
| \XeTeX | \ازی تک |

Table 3: The Equivalent L^AT_EX Environments

| Environment in L ^A T _E X | Equivalent Persian Environment |
|--|--------------------------------|
| abstract | چکیده |
| appendix | پیوست |
| array | آرایه |
| center | وسط‌چین |
| description | توضیح |
| displaymath | ریاضی نمایشی |
| document | نوشتار |
| enumerate | شمارش |
| figure | شکل |
| figure* | شکل* |
| filecontents | محتوای پرونده |
| filecontents* | محتوای پرونده* |
| flushleft | چپ چین |
| flushright | راست چین |
| itemize | فقرات |
| letter | نامه |
| list | لیست |
| longtable | جدول دراز |
| lrbox | کادر رج |
| math | ریاضی |
| matrix | ماتریس |
| minipage | صفحه کوچک |
| multicols | چندستونی‌ها |
| multiline | چند خطی |
| note | یادداشت |

Continued on next page

| Environment in LATEX | Equivalent Persian Environment |
|----------------------|--------------------------------|
| overlay | انباشت |
| picture | تصویر |
| quotation | اقتباس |
| quote | نقل |
| slide | اسلاید |
| sloppypar | پارنامرتب |
| split | شکافتن |
| subarray | زیرآرایه |
| tabbing | جاگذاری |
| table | لوح |
| table* | *لوح |
| tabular | جدول |
| tabular* | *جدول |
| thebibliography | مراجع |
| theindex | محتوای نمایه |
| titlepage | صفحه عنوان |
| trivlist | لیست بدوی |
| verbatim | همانطور که هست |
| verbatim* | همانطور که هست* |
| verse | شعر |

Table 4: The Equivalent XePersian Environments

| Environment in XePersian | Equivalent Persian Environment |
|--------------------------|--------------------------------|
| latin | لاتین |
| LTR | متن چپ |
| LTRitems | دسته‌بندی چپ |
| persian | پارسی |
| RTL | متن راست |
| RTLitems | دسته‌بندی راست |

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

Table 5: The Equivalent LATEX position arguments

| Position argument in LATEX | Equivalent Persian position argument |
|----------------------------|--------------------------------------|
| b | ز |
| c | و |
| C | س |
| h | ا |
| H | آ |

Continued on next page

Position argument in L^AT_EX Equivalent Persian position argument

| | |
|---|---|
| J | ت |
| l | ج |
| L | ف |
| m | م |
| p | پ |
| p | ص |
| r | ر |
| R | ا |
| s | ک |
| t | ب |

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

2.4.5 Localizations of the keys and key values of `graphicx` package

The equivalent Persian keys and key values of `graphicx` package is shown in [Table 6](#) and [Table 7](#) respectively.

Table 6: Persian Equivalent keys of `graphicx` package

| Original Key | Equivalent Persian Key |
|------------------------------|------------------------|
| <code>draft</code> | پیش‌نویس |
| <code>origin</code> | مبدا |
| <code>clip</code> | بی‌اضافه |
| <code>keepaspectratio</code> | حفظ‌تناسب |
| <code>natwidth</code> | پهنا‌ی طبیعی |
| <code>natheight</code> | بلندای‌طبیعی |
| <code>bb</code> | مختصات |
| <code>viewport</code> | محدوده‌نمایش |
| <code>trim</code> | حذف‌اطراف |
| <code>angle</code> | زاویه |
| <code>width</code> | پهنا |
| <code>height</code> | بلندا |
| <code>totalheight</code> | بلندای‌کل |
| <code>scale</code> | ضریب |
| <code>type</code> | نوع |
| <code>ext</code> | پسوند |
| <code>read</code> | خواندنی |
| <code>command</code> | فرمان |
| <code>x</code> | طول |

Continued on next page

| Original Key | Equivalent Persian Key |
|--------------|------------------------|
| y | عرض |
| units | واحد |

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

| Original Key value | Equivalent Persian Key value |
|--------------------|------------------------------|
| b | ز |
| B | ک |
| false | نادرست |
| l | ج |
| r | ر |
| t | ب |
| true | درست |

2.4.6 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 | ویرگی های قلم عمودی |
| BoldFeatures | ویرگی های قلم سیاه |
| ItalicFeatures | ویرگی های ایتالیک |
| BoldItalicFeatures | ویرگی های قلم ایتالیک سیاه |
| SlantedFeatures | ویرگی های قلم خوابیده |
| BoldSlantedFeatures | ویرگی های قلم خوابیده سیاه |
| SmallCapsFeatures | ویرگی های قلم کلاه کوچک |
| SizeFeatures | ویرگی های اندازه |
| Scale | ضریب |

Continued on next page

| Original font feature | Equivalent Persian font feature |
|-----------------------|---------------------------------|
| WordSpace | فضای کلمه |
| PunctuationSpace | فضای نقطه‌گذاری |
| FontAdjustment | تنظیم قلم |
| LetterSpace | فضای حرف |
| HyphenChar | نویسه‌تیره |
| Color | رنگ |
| Opacity | کدری |
| Mapping | نگاشت |
| Weight | سنگینی |
| Width | پهنا |
| OpticalSize | اندازه چشمی |
| FakeSlant | خوابیده تقلیبی |
| FakeStretch | کشش تقلیبی |
| FakeBold | سیاه تقلیبی |
| AutoFakeSlant | خوابیده تقلیبی خودکار |
| AutoFakeBold | سیاه تقلیبی خودکار |
| Ligatures | دویاچند حرف متصل به هم |
| Alternate | متناوب |
| Variant | گوناگون |
| Variant | مجموعه سبکی |
| CharacterVariant | گوناگونی نویسه |
| ScriptStyle | سبک اسکریپت |
| ScriptScriptStyle | سبک اسکریپت اسکریپت |
| Style | سبک |
| Annotation | یادداشت |
| RawFeature | ویرگی‌های کال |
| CharacterWidth | پهنهای نویسه |
| Numbers | ارقام |
| Contextuals | متغیر |
| Diacritics | تفکیک کنندگان |
| 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 | پیش‌فرض |
|--------------|---------------------|-----------------------------|---------|
| Language | Default | | |
| Language | Parsi | | پارسی |
| Script | Parsi | | پارسی |
| Script | Latin | | لاتین |

2.5 A Sample Input TEX File

```

1 \documentclass{article}
2 \usepackage{xepersian}
3 \settextfont{XB Niloofar}
4 \title{یک سند نمونه}
5 \author{نام نویسنده}
6 \begin{document}
7 \maketitle
8 \tableofcontents
9 \part{عنوان بخش}
10 ...
11 \section{عنوان قسمت}
12 ...
13 \subsection{عنوان زیرقسمت}
14 ...
15 \subsubsection{عنوان زیر زیرقسمت}
16 ...
17 \end{document}

```

2.6 Font Commands

2.6.1 Basic Font Commands

```

\settextfont [Options] {\langle font name\rangle}
\setlatintextfont [Options] {\langle font name\rangle}
\setdigitfont [Options] {\langle font name\rangle}
\setmathsf digitfont [Options] {\langle font name\rangle}
\setmathtt digitfont [Options] {\langle font name\rangle}

```

- ☞ Options in any font command in this documentation are anything that `fontspec` package provides as the option of loading fonts, except `Script` and `Mapping`.
- ☞ `\settextfont` will choose the default font for Persian texts of your document. If you do not use this command at all, the `Persian Modern`² font will be used for Persian texts of your document.
- ☞ `\setlatintextfont` will choose the font for Latin texts of your document. If you do not use this command at all, the default `TeX` font (fonts used in this documentation) will be used for Latin texts of your document.
- ☞ `\setdigitfont` will choose the Persian font for digits in math mode. By default, digits in math mode will appear in Persian form and if you do not use this command at all, the `Persian Modern` font for digits in math mode will be used.

²You do not need to install `Persian Modern` fonts since they are already included in your `TeX` distribution.

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

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

2.6.2 Defining Extra Persian and Latin Fonts

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

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

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

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

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

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

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

2.6.3 Choosing Persian Sans Font

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

2.6.4 Choosing Persian Mono Font

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

2.6.5 Choosing Persian Iranic Font

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

2.6.6 Choosing Persian Navar Font

```
\setnavarfont [Options] {\<font name>}  
\navarfamilly \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 Short Latin and Persian Texts

```
\lr{\text} \rl{\text}
```

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

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

3.2 Miscellaneous Commands

```
\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.

3.3 New Commands

```
\Latincite
```

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

3.4 Additional Counters

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

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

3.5 Things To Know About **\setdigitfont**, **\setmathsf digitfont**, and **\setmathtt digitfont**

```
\DefaultMathsDigits \PersianMathsDigits \AutoMathsDigits
```

- ☞ As we discussed before, **\setdigitfont** will choose the Persian font for digits in math mode. By default, digits in math mode will appear in Persian form and if you do not use this command at all, the **Persian Modern** font for digits in math mode will be used.
- ☞ As we discussed before, **\setmathsf digitfont**, and **\setmathtt digitfont** will choose the Persian sans serif and typewriter fonts for digits in math mode. By using this command, digits in math mode will appear in Persian form and if you do not use this command at all, you will get default **T_EX** font for digits in math mode and digits appear in their original form (Western).

If you use **\setdigitfont**, **\setmathsf digitfont**, and **\setmathtt digitfont**, then you should know that:

- ☞ By default, **\AutoMathsDigits** is active, which means that in Persian mode, you get Persian digits in math mode and in Latin mode, you get **T_EX**'s default font and digits in math mode.
- ☞ If you use **\PersianMathsDigits** anywhere, you will overwrite XePersian's default behaviour and you will always get Persian digits in math mode.

⚡ If you use `\DefaultMathsDigits` anywhere, again you will overwrite XePersian's default behaviour and you will always get TeX's default font and digits in math mode.

4 New Conditionals

4.1 Shell escape (or write18) conditional

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

5 Bilingual Captions

XePersian sets caption bilingually. This means if you are in RTL mode, you get Persian caption and if you are in LTR mode, you get English caption.

5.1 Support For Various Packages

In addition to what `bidi` package supports, XePersian also support a few packages. This support is more about language aspect rather than directionality. These packages are `algorithmic`, `algorithm`, `enumerate`, and `backref` packages.

5.1.1 Things You Should Know about Support For `enumerate` Package

The `enumerate` package gives the `enumerate` environment an optional argument which determines the style in which the counter is printed.

An occurrence of one of the tokens `A`, `a`, `I`, `i`, or `1` produces the value of the counter printed with (respectively) `\Alpha`, `\alpha`, `\Roman`, `\roman` or `\arabic`.

In addition with the extra support that XePersian provides, an occurrence of one of the tokens `l`, `ş`, or `ç` produces the value of the counter printed with (respectively) `\harfi`, `\adadi`, or `\tartibi`.

These letters may be surrounded by any strings involving any other TeX expressions, however the tokens `A`, `a`, `I`, `i`, `1`, `l`, `ş`, `ç` must be inside a {} group if they are not to be taken as special.

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

5.2 Index Generation

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

5.3 Converting Your FarsiTeX Files To XePersian or Unicode

There is a python program written by Mostafa Vahedi that enables you to convert FarsiTeX files to XePersian or unicode. This program can be found in `doc` folder with the name `ftxe-0.12.py`. To convert your FarsiTeX files to XePersian, put `ftxe-0.12.py` in the same directory that your FarsiTeX file is, and then open a terminal/command prompt and do the following:

```
python ftxe-0.12.py file.ftx file.tex
```

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

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

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

Where

`-r` (DEFAULT) recursively consider files included in the given files

`-s` do not recursively consider files

`-x` (DEFAULT) insert XePersian related commands

`-u` only convert to unicode (and not to XePersian)

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

6 Extra Packages And Classes

6.1 Magazine Typesetting

6.1.1 Introduction

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

6.1.2 Usage

To create³ a magazine just load the class as usual⁴, with

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

at the beginning of your source file. The class options are described in [subsubsection 6.1.12](#).

From this point it is possible to include packages and renew class commands described in [subsubsection 6.1.9](#).

6.1.3 Front Page

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

```
\firstimage \firstarticle
```

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

```
\firstarticle{\langle title \rangle}{\langle opening \rangle}{\langle time \rangle}
```

first two arguments are mandatory and represent heading and the opening paragraph. Last argument is optional (you can leave it blank) and indicates the time when article happened.

```
\secondarticle
```

The second piece of article is included using the command `\secondarticle` just as the first article. The main difference are that this second piece has two more arguments and it does not include an image.

```
\secondarticle{\langle title \rangle}{\langle subtitle \rangle}{\langle opening \rangle}{\langle pagesof \rangle}{\langle time \rangle}
```

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

³For a sample file, please look at `magazine-sample.tex` in the doc folder

⁴You also need to load `graphicx`, `xunicode` and `xepersian` packages respectively, after loading the document class and choose fonts for the main text, Latin text and digits in maths formulas. For more detail see [section 2](#) of the documentation.

```
\thirdarticle
```

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

```
\thirdarticle{\langle title\rangle}{\langle subtitle\rangle}{\langle opening\rangle}{\langle pagesof\rangle}{\langle time\rangle}
```

The arguments meaning is the same as `\secondarticle` command.

The front page includes three information blocks besides the news: `indexblock` which contains the index, `authorblock` which includes information about the author and a `weatherblock` containing a weather forecast. All these three environments are mostly a frame in the front page therefore they can be redefined to fit your personal wishes but I kept them to give an example and to 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 [subsection 6.1.4](#). In order to get a correct output, it is necessary to leave a blank line between index items.

The `authorblock` environment can include whatever you would like. I called it `authorblock` because I think it is nice to include some author reference in the front page: who you are, why are you doing this... This environment creates a frame box in the bottom right corner of the front page with your own logo at the top.

```
\weatheritem
```

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

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

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

6.1.4 Inside

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

6.1.5 The article environment

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

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

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

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

```
\authorandplace \timestamp
```

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

```
\image
```

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

```
\image{\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}...
\shortarticleitem{\langle title\rangle}{\langle text\rangle}
...
\end{shortarticle}
```

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

6.1.8 Commands between articles

```
\articlesep \newsection
```

There are two commands you can use among the articles inside `xepersian-magazine`: `\articlesep` and `\newsection`. The first one does not take any parameter and just draws a line between two articles. The second changes the content of `\xepersian@section` to the new `<section name>`. From the point it is used, all articles which follow will be grouped within the new section.

```
\newsection{<section name>}
```

6.1.9 Customization

`xepersian-magazine` includes many commands which can be used to customize its aspect, from the front page to the last page. I will list them grouped so it is easy to find them. Treat them as standard L^AT_EX commands, using `\renewcommand` to change their behaviour.

6.1.10 Front Page

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

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

```
\customlogo{<text>}  
\customminilogo{<text>}  
\custommagazinename{<text>}
```

```
\edition \editionformat
```

The edition text has to be declared in the preamble of the document. One important thing to know is that `\author`, `\date` and `\title` have no effect inside `xepersian-magazine` since the magazine date is taken from `\today` command and the other two are only for the title page (if using `\maketitle`).

```
\indexFormat \indexEntryFormat \indexEntryPageTxt  
\indexEntryPageFormat \indexEntrySeparator
```

When defining the index in the front page, there are several commands to customize the final index style. `\indexFormat` sets the format of the title; `\indexEntryFormat`, the format of each index entry; `\indexEntryPageTxt` and `\indexEntryPageFormat` lets you define which is the text that goes with the

page number and its format. Finally, `xepersian-magazine` creates a thin line between index entries, you can redefine it using `\indexEntrySeparator`. To get the index with `\xepersian@indexwidth` is provided.

```
\weatherFormat \weatherTempFormat \weatherUnits
```

Relating to the weather block, the title format can be changed redefining `\weatherFormat`. In order to customize the format of the temperature numbers and their units it is necessary to redefine `\weatherTempFormat` and `\weatherUnits` respectively.

```
*TitleFormat *SubtitleFormat *TextFormat
```

The main article that appear in the front page can change their formats. To obtain that there are three standard commands to modify the title, subtitle and text style. You just have to replace the star (*) with first, second or third depending on which article you are editing. Note that first piece of article has no subtitle therefore it does not make any sense to use the non-existent command `\firstSubtitleFormat`.

```
\pictureCaptionFormat \pagesFormat
```

Two other elements to configure are the picture captions and the pages or section format in the entire document. To proceed just redefine the macros `\pictureCaptionFormat` and `\pagesFormat`.

6.1.11 Inside The Magazine

```
\innerTitleFormat \innerSubtitleFormat \innerAuthorFormat  
\innerPlaceFormat
```

The articles inside `xepersian-magazine` may have a different format from the ones in the front page. To change their title or subtitle format redefine `\innerTitleFormat` and `\innerSubtitleFormat`. The article text format matches the document general definition. When using the `\authorandplace` command, you might want to change the default style. Just renew `\innerAuthorFormat` and `\innerPlaceFormat` to get the results.

```
\timestampTxt \timestampSeparator \timestampFormat
```

The `\timestamp` command described in [subsection 6.1.5](#) lets you introduce the time of the event before the article text. You can configure its appearance by altering several commands: `\timestampTxt` which means the text after the timestamp; `\timestampSeparator` which defines the element between the actual timestamp and the beginning of the text and, finally, `\timestampFormat` to change the entire timestamp format.

```
\innerTextFinalMark
```

xepersian-magazine puts a small black square at the end of the article. As I wanted to create a highly customizable L^AT_EX class I added the macro \innerTextFinalMark to change this black square. This item will appear always following the last character of the text with the~ character.

```
\minraggedcols \raggedFormat
```

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

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

```
\heading \foot
```

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

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

If you still prefer to use fancyhdr macros, use them after the `frontpage` environment.

xepersian-magazine by default places no headers and footers. If you want headers and footers, then after loading xepersian package, you should write \pagestyle{fancy} at the preamble of your document.

6.1.12 Class Options

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

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

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

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

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

6.2 Typesetting Multiple-choice Questions

6.2.1 Introduction

`xepersian-multiplechoice` is a package for making multiple choices questionnaires under L^AT_EX. A special environment allows you to define questions and possible answers. You can specify which answers are correct and which are not. `xepersian-multiplechoice` not only formats the questions for you, but also generates a “form” (a grid that your students will have to fill in), and a “mask” (the same grid, only with correct answers properly checked in). You can then print the mask on a slide and correct the questionnaires more easily by superimposing the mask on top of students’ forms.

6.2.2 Usage

Here we now explain the usage of this package, however there are four example files, namely `test-question-only.tex`, `test-solution-form.tex`, `test-empty-form.tex` and `test-correction.tex`, available in `doc` folder that you may want to look at.

6.2.3 Loading The Package

You can load the package as usual by:

```
\usepackage [Options] {xepersian-multiplechoice}
```

The available options are described along the text, where appropriate.

6.2.4 Creating Questions

Here’s a simple example demonstrating how to produce a new question:

```
1 \begin{question}{سؤال}
2 \false ١ جواب
3 \true ٢ جواب
4 \false ٣ جواب
5 \false ٤ جواب
6 \end{question}
```

```

7 \begin{correction}
8 جواب واقعی و علت اینکه این جواب، جواب واقعی هست
9 \end{correction}

```

6.2.5 The question Environment

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

| | |
|--------------------|---------------------|
| <code>\true</code> | <code>\false</code> |
|--------------------|---------------------|

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

6.2.6 Question Numbers

The `question` environment is associated with a L^AT_EX counter named `question`. This counter stores the number of the next (or current) question. It is initialized to 1, and automatically incremented at the end of `question` environments. You might want to use it to format question titles. For instance, you could decide that each question belongs to a subsection in the `article` class, and use something like this before each question: `\subsection*{Question \thequestion}`

6.2.7 The Form and the Mask

| | |
|------------------------|------------------------|
| <code>\makeform</code> | <code>\makemask</code> |
|------------------------|------------------------|

Based on the questions appearing in your document, `xepersian-multiplechoice` has the ability to generate a “form” (a grid that your students will have to fill in), and a “mask” (the same grid, only with correct answers properly checked in). This can make the correction process easier.

To generate a form and a mask, use the macros `\makeform` and `\makemask`. `xepersian-multiplechoice` uses two auxiliary files to build them. These files have respectively an extension of `frm` and `msk`. If you use these macros, you will need two passes of L^AT_EX in order to get a correctly formatted document.

6.2.8 Typesetting corrections

The “correction” mode allows you to automatically typeset and distribute corrections to your students. These corrections are slightly modified versions of your questionnaire: each possible answer is prefixed with a small symbol (a visual clue) indicating whether the answer was correct or wrong. In addition, you can typeset explanations below each question.

To activate the correction mode, use the `correction` option. It is off by default.

To typeset explanations below the questions, use the `correction` environment (no argument). The contents of this environment is displayed only in correction mode. In normal mode, it is simply discarded.

In addition, note that `xepersian-multiplechoice` cancels the actions performed by `\makeform` and `\makemask` in `correction` mode. This is to avoid further edition of the source when typesetting a correction.

6.2.9 Important Note

Currently, `xepersian-multiplechoice` requires that you provide a constant number of proposed answers across all questions in your `xepersian-multiplechoice`. This is something natural when you want to build forms, but this might me too restrictive otherwise, I'm not sure, so it is possible that this restriction will be removed in future versions.

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

6.3 Customising The Package

6.3.1 The question environment

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

`\questionspace` is the amount of extra vertical space to put under the question, before the list of proposed answers. This is a L^AT_EX length that defaults to `0pt`.

Before the list of possible answers, a short title is displayed (for English, it reads “Possible answers:”). The `\answerstitlefont` macro takes one mandatory argument which redefines the font to use for the answers title. By default, `\bfseries` is used.

Each proposed answer in the list is numbered automatically (and alphabetically). The `\answernumberfont` macro takes one mandatory argument which redefines the font to use for displaying the answer number. By default, `\bfseries` is used.

6.3.2 The Form and the Mask

```
\headerfont \X
```

The `\headerfont` macro takes one mandatory argument which redefines the font to use for the headers (first line and first column) of the form and mask arrays. By default, `\bfseries` is used.

In the mask, correct answers are checked in by filling the corresponding cell with an “X” character. If you want to change this, call the `\X` macro with one (mandatory) argument.

6.3.3 The correction

```
\truesymbol \falsesymbol
```

In correction mode, labels in front of answers are modified to give a visual clue about whether the answer was correct or wrong. By default, a cross and a small arrow are used. You can change these symbols by using the `\truesymbol` and `\falsesymbol` macros. For instance, you could give a fancier look to your correction by using the `pifont` package and issuing:

```
\truesymbol{\ding{'063}~}
\falsesymbol{\ding{'067}~}
```

```
\correctionstyle
```

The appearance of the contents of the correction environment can be adjusted by using the `\correctionstyle` macro. By default, `\itshape` is used.