

# Writing Kurdish language in $\text{\LaTeX}$

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# There are two ways to write in Kurdish using $\text{\LaTeX}$

- Using **arabtex** package
- Using **xepersian** package

# Using arabtex

## ① Advantages

- ① Compiles using **pdf~~l~~atex** (faster compiling)
- ② Doesn't require any external fonts

## ② Disadvantages

- ① Uses a weird English+symbol syntax (high learning curve)
- ② There is an auto converter but its not perfect
- ③ Harder to edit afterwards

# Using xepersian

## ① Advantages

- ① Compiles using **xelatex** (slower than pdflatex)
- ② Easy to write and edit

## ② Disadvantages

- ① Somewhat confusing sometimes when mixing with English
- ② Only a few fonts are 100% compatible
- ③ Some  $\text{\LaTeX}$  packages do not produce expected results using **xelatex** compiler

## Example for arabtex

```
\documentclass{article}
```

```
\usepackage{arabtex}
```

```
\begin{document}
```

```
  \begin{arabtex}
```

```
    \setkurdish
```

```
    s^lAw ^cony bA^sy
```

```
  \end{arabtex}
```

```
\end{document}
```

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## Example for xepersian

```
\documentclass{article}  
\usepackage{xepersian}  
\settextfont{XB Titre}  
\begin{document}
```

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```
\end{document}
```

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# Compatible fonts for xepersian

The fonts **must** be unicode (Not ali-k-samik etc.. fonts) The ones that i tested and worked are

- Nizar Nastaliq Kurdish
- Ubuntu Kurdish 0.81 met
- HSAIBasimB
- The fonts that start with X in `kurdfonts.com`, like **XB Titre**

## Some notes

- All the fonts can be simply found in google search
- The name of the font is should be the complete name with spaces, otherwise the compiler won't find it
- It should also be installed on the system, to make sure try to find the font in Microsoft Word first.

# The Unicode to latex syntax conversion for **arabtex**

There are two ways to write in this syntax

- Learning the syntax through documentation
  - **A Kurdish tutorial** [https://issuu.com/asadabozed/docs/kurdish\\_alphabet\\_in\\_latex1](https://issuu.com/asadabozed/docs/kurdish_alphabet_in_latex1)
  - **arabtex documentation** <ftp://ftp.dante.de/tex-archive/language/arabic/arabxetex/arabxetex.pdf>
- **Using an auto converter**  
[https://github.com/hunar1997/Unikurd\\_to\\_Latex](https://github.com/hunar1997/Unikurd_to_Latex)



# The Auto converter for arabtex

- I made a converter based on the documentation and shared the code on github so that anyone can help to improve it
- You will also find this presentation there, all the links are clickable in the pdf, along with a link to a live website that contains the converter
- Or you can download the single **.html** file and run it using any web browser

# Useful places to explore and learn xepersian

- There is a Kurdish Facebook page that uses xepersian package to write amazing useful documents

<https://www.facebook.com/latexforkurdish>

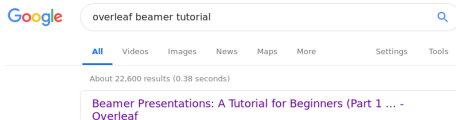


page.png



# Source recommendation for learning $\text{\LaTeX}$

- The best website i found was <https://www.overleaf.com/> which is an online  $\text{\LaTeX}$  compiler, you can sign up for free and use  $\text{\LaTeX}$  without downloading any software, both privately and publicly
- This website also has extremely clear, to the point, video and text+image, and beginner friendly tutorials to learn  $\text{\LaTeX}$  for making theses, books, articles, presentations, etc..
- i learned how to make this presentation from scratch in two hours
- Just type in google (overleaf **subject** tutorial) and the top result should be it



Thank you for your time  
if you have any question or problem, feel free  
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