## Minimal steps to typeset Vietnamese

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This document tries to answer the question that has been often asked: *How can I typeset just a few Vietnamese words* in my document, which is in English (or French/German/...)?

The answer depends very much on a particular scenario, however I assume that you are in a hurry, you don't want to bother with issues like how to display and write Vietnamese in your TEX editor. You only have a few Vietnamese words in your LTEX file and you would like to see them properly displayed in your final PDF or PS file.

- 1. As the very first requirement, you must have some minimal Large support for Vietnamese:
  - Check whether you have VnTEX installed. VnTEX is included in teTEX, MikTEX and TEXLive.
  - If the above is not the case, try to download and install VnTEX by following the instructions at http://vntex.org/download/vntex.
  - If you can't install VnT<sub>E</sub>X, you must have at least Latin Modern fonts installed. Then download <a href="http://vntex.org/download/vntex-support/t5enc.def">http://vntex.org/download/vntex-support/t5enc.def</a> and put it to the directory where your ET<sub>E</sub>X file is.
  - If all the above fails, try to get help from someone else to solve at least one of those issues.
- 2. Make sure you have package fontenc loaded with T5 encoding. For example, if your document contains European languague(s) only, then you should have a line saying

```
\usepackage[T1,T5]{fontenc}
```

in your preamble.

3. An example how to input Vietnamese words may look like this:

```
{\fontencoding{T5}\selectfont Ti\'\ecircumflex{}ng Vi\d\ecircumflex{}t} which gives the output as Tiếng Việt.
```

4. The following table contains all Vietnamese letters for your reference:

J		,	
Ă	\ABREVE	â	\'\acircumflex
Ă	\Abreve	é	\'\ecircumflex
	\ACIRCUMFLEX	ô	\'\ocircumflex
Â	\Acircumflex	ớ	\',\ohorn
Đ	\DJ	ứ	\'\uhorn
Ê	\ECIRCUMFLEX	á	\'a
	\Ecircumflex	é	\'e
	\Ocircumflex	í	\'i
Ô	\OCIRCUMFLEX	ó	\'0
Q	\OHORN		\'u
Q	\Ohorn	ý Â	\'y
ľ	\UHORN	Â	\^A
ľ	\Uhorn	Ê	\^E
ă	\abreve	Ô	\^0
â	\acircumflex	â	\^a
đ	\dj	ê	\^e
ê	\ecircumflex	ô	\^o
1	\i	À	\ ^ A
ô	\ocircumflex	È	\'E
ď	\ohorn	Ì	\'I
ď	\uhorn	Ò	\'0
Á	\'A		\'U
É	\'E		\
Í	\'I	Ý Ř	\'\ABREVE
Ó	\'0	Ř	\'\Abreve
Ú	\'U	À	\'\ACIRCUMFLEX
Ý	\'Y	À	\'\Acircumflex
Ý ¿A ŚA ŚĀ ŚĒ ŚĒ ŚÔ ŚÔ	\'\ABREVE	ÀÀÀÈÈÒÒ	\'\ECIRCUMFLEX
Á	\',\Abreve	È	\'\Ecircumflex
Â	\',\ACIRCUMFLEX	Ò	\'\OCIRCUMFLEX
Á	\'\Acircumflex	Ò	\'\Ocircumflex
É	\'\ECIRCUMFLEX	Ó	\'\OHORN
É	\'\Ecircumflex	Ó	\'\Ohorn
δ	\'\OCIRCUMFLEX	Ϋ́	\'\UHORN
Ô	\'\Ocircumflex	Ϋ́	\'\Uhorn
Ó	\'\OHORN	à	\'\abreve
Ó	\'\0horn	à	\'\acircumflex
Ú	\'\UHORN	è	\'\ecircumflex
Ú	\'\Uhorn	ò	\'\ocircumflex
á	\'\abreve	ά	\'\ohorn
-	, ,	J	, , , , , , , , , , , , , , , , , , , ,

		2	
ừ	\'\uhorn	Ŏ	\h 0
à	\'a	Ů	\h U
	\	Ý Å Å Å	\h Y
ì	\'i	Ă	\h \ABREVE
ò	\'0	Ă	\h \Abreve
ù	\'u	Â	\h \ACIRCUMFLEX
ỳ	\'y	Â	\h \Acircumflex
À	\d A	Â Ê Ê Ô Ô	\h \ECIRCUMFLEX
Ò İ È	\d E	Ê	\h \Ecircumflex
İ	\d I	Ô	\h \OCIRCUMFLEX
	\d 0	Ô	\h \Ocircumflex
Ų	\d U	ď	\h \OHORN
Ÿ	\d Y	Ŏ	\h \Ohorn
Ă	\d \ABREVE	ử	\h \UHORN
Ă	\d \Abreve	ử	\h \Uhorn
Â	\d \ACIRCUMFLEX	å	\h \abreve
Â	\d \Acircumflex	ấ	\h \acircumflex
Ê	\d \ECIRCUMFLEX	ể	\h \ecircumflex
Ê	\d \Ecircumflex	ố	\h \ocircumflex
Ô	\d \OCIRCUMFLEX	ở	\h \ohorn
Ų Y Ă Ă Â Â Ê Ê Ô Ô O	\d \Ocircumflex	ử	\h \uhorn
Ò	\d \OHORN	ả	\h a
Ò	\d \Ohorn	ẻ	\h e
Ų	\d \UHORN	i	\h i
Ų	\d \Uhorn	ó	\h o
ă	\d \abreve	ủ	\h u
ă â ê ô	<pre>\d \acircumflex</pre>	ŷ	\h y
ệ	\d \ecircumflex	$\dot{\tilde{A}}$	\~A
ộ	\d \ocircumflex	$ ilde{ t E}$	\~E
Ģ	\d \ohorn	Ĩ	\~I
ự	\d \uhorn	Õ	\~0
ạ	\d a		\~U
	\d e	$ ilde{ ext{Y}}$	\~Y
e i	\d i	${ ilde{A}}$	\~\ABREVE
Ò	\d o	${ ilde{A}}$	\~\Abreve
ų	\d u	Ã	\~\ACIRCUMFLEX
	\d y	Ã	\~\Acircumflex
y Å	\h A	$ { ilde{\hat{ ilde{E}}}}$	\~\ECIRCUMFLEX
Ė	\h E	ŨŶ¤Ă¤ĂĸÃĸ£ĸ£ĸŎ	\~\Ecircumflex
Ì	\h I	Õ	\~\OCIRCUMFLEX
		•	, ,

```
\tilde{\hat{O}} \~\Ocircumflex
                                     \~\ohorn
                                   ữ \~\uhorn
  \~\OHORN
                                   ã
                                      \~a
  \~\Ohorn
                                   ẽ
                                      \~e
  \~\UHORN
                                   ĩ
                                      \~i
  \~\Uhorn
                                   õ
                                      \~o
   \~\abreve
                                      \~u
   \~\acircumflex
                                      \~y
   \~\ecircumflex
   \~\ocircumflex
```

- 5. If you have quite a lot of Vietnamese words, then it can be somewhat tedious to translate them to the above form (often called as <a href="MTEX">MTEX</a> Internal Character Representation LICR). On Windows you can use the package <a href="http://vntex.org/download/vntex-support/tovntex.zip">http://vntex.org/download/vntex-support/tovntex.zip</a> to translate text in clipboard from VIQR or UTF-8 to LICR by one key press. The same (or close) convenience could be made for UNIX/Linux users, but at somewhat higher cost due to deficiencies of UNIX-like systems. So if you don't use Windows then you are out of luck, sorry. However, if you use Vim, you can still download the package mentioned above, and use the vim script inside the zip archive to do the conversion. If you want to make this easier for UNIX users then let me know.
- 6. If you still have questions, join the VnT<sub>E</sub>X mailing list at https://lists.sourceforge.net/lists/listinfo/vntex-users.

Good luck!